

=> file reg

FILE 'REGISTRY' ENTERED AT 15:00:57 ON 20 FEB 2003  
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=> d his

FILE 'LREGISTRY' ENTERED AT 14:04:19 ON 20 FEB 2003  
L1 STR

FILE 'REGISTRY' ENTERED AT 14:27:09 ON 20 FEB 2003  
L2 8 S L1  
L3 204 S L1 FUL  
SAV L3 WAL584/A  
L4 284 S (AG(L)X)/ELS (L) 2/ELC.SUB

FILE 'LCA' ENTERED AT 14:35:22 ON 20 FEB 2003  
L5 116 S ((SILVER# OR AG) (W) (HALIDE# OR MONOHALIDE# OR DIHALIDE#  
L6 113 S (AGX OR AGX2 OR AGF OR AGF2 OR AGCL OR AGCL2 OR AGBR OR  
L7 720 S PHOTOG? OR IMAGE# OR IMAGING# OR PHOTOIMAG? OR REPROG?

FILE 'HCA' ENTERED AT 14:38:28 ON 20 FEB 2003  
L8 111 S L3  
L9 81180 S L4 OR L5 OR L6 OR AGX  
L10 108 S L8 AND (L7 OR 74/SX,SC)  
L11 94 S L8 AND L9  
L12 94 S L10 AND L11

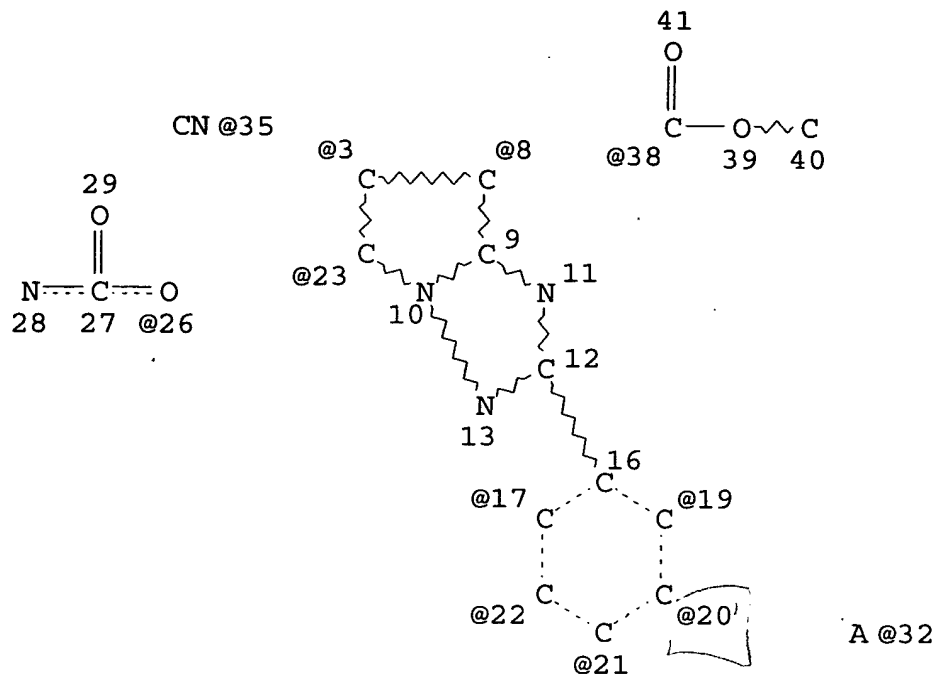
FILE 'LREGISTRY' ENTERED AT 14:39:34 ON 20 FEB 2003  
L13 STR L1

FILE 'REGISTRY' ENTERED AT 14:45:04 ON 20 FEB 2003  
L14 3 S L13 SSS SAM SUB=L3  
L15 59 S L13 SSS FUL SUB=L3  
SAV L15 WAL584A/A

FILE 'HCA' ENTERED AT 14:47:44 ON 20 FEB 2003  
L16 25 S L15  
L17 24 S L16 AND L9  
L18 25 S L16 AND (L7 OR 74/SX,SC)  
L19 24 S L17 AND L18  
L20 25 S L19 OR L16  
L21 70 S L12 NOT L20  
L22 6838 S CYAN OR CYANS  
L23 583531 S COUPL?  
L24 51 S L21 AND L22 AND L23  
L25 39 S L24 AND 1907-2000/PY  
L26 19 S L20 AND 1907-2000/PY

FILE 'REGISTRY' ENTERED AT 15:00:57 ON 20 FEB 2003

=> d l15 que stat  
L1 STR



VPA 26-23/3/8 U  
VPA 35-23/3/8 U  
VPA 38-23/3/8 U  
VPA 32-19/20/21/22/17 U

NODE ATTRIBUTES:

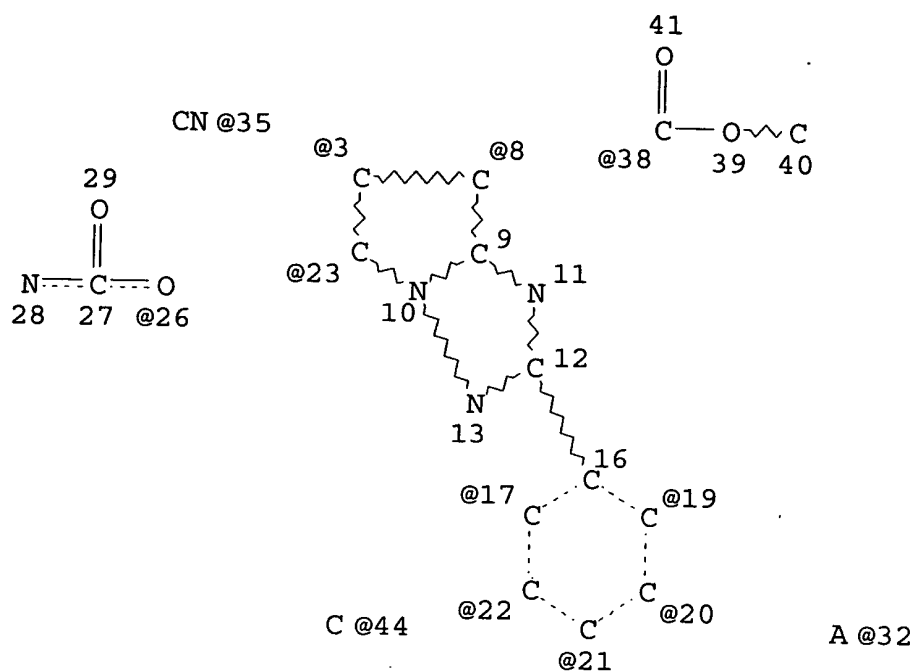
NSPEC IS RC AT 28  
NSPEC IS RC AT 32  
NSPEC IS RC AT 40  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L3 204 SEA FILE=REGISTRY SSS FUL L1  
L13 STR



VPA 26-23/3/8 U  
 VPA 35-23/3/8 U  
 VPA 38-23/3/8 U  
 VPA 32-19/20/21/22/17 U  
 VPA 44-19/20/21/22/17 U

## NODE ATTRIBUTES:

NSPEC IS RC AT 28  
 NSPEC IS RC AT 32  
 NSPEC IS RC AT 40  
 NSPEC IS RC AT 44

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 25

## STEREO ATTRIBUTES: NONE

L15 59 SEA FILE=REGISTRY SUB=L3 SSS FUL L13

100.0% PROCESSED 204 ITERATIONS  
 SEARCH TIME: 00.00.01

59 ANSWERS

=> file hca

FILE 'HCA' ENTERED AT 15:01:07 ON 20 FEB 2003

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=> d 126 1-19 cbib abs hitstr hitind

L26 ANSWER 1 OF 19 HCA COPYRIGHT 2003 ACS

132:57058 **Silver halide color photographic**

material. Mizukawa, Hiroki; Naruse, Hideaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11352647 A2

19991224 Heisei, 48 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1998-156185 19980604.

AB The title **photog.** material contains .gtoreq.1 of magenta couplers having .gtoreq.1 4- equiv. magenta coupler residue and .gtoreq.1 2-equiv one in their mols., and/or yellow couplers having .gtoreq.1 4-equiv yellow coupler residue and .gtoreq.1 2-equiv one in their mols., and/or cyan couplers having .gtoreq.1 4-equiv cyan coupler residue and .gtoreq.1 2-equiv one in their mols. The material shows high coloring properties in both heat development and wet development processes.

IT 252898-85-4

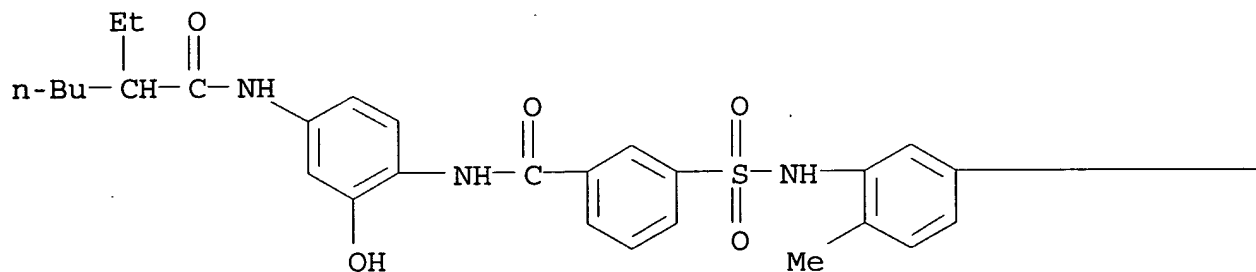
(**silver halide color photog.**

material contg. specific couplers for good coloring properties in both heat and wet development processes)

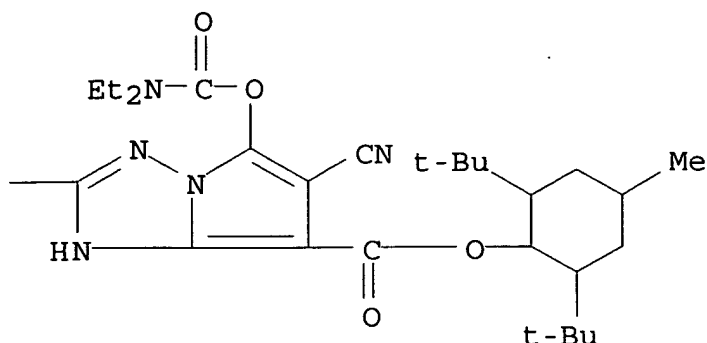
RN 252898-85-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[[(diethylamino)carbonyl]oxy]-2-[3-[[[3-[[[4-[(2-ethyl-1-oxohexyl)amino]-2-hydroxyphenyl]amino]carbonyl]phenyl]sulfonyl]amino]-4-methylphenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM G03C007-34  
ICS G03C001-42; G03C007-36; G03C007-38; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 28
- ST **silver halide color photog** material  
magenta yellow cyan coupler
- IT **Photographic** films  
(color, heat-developable; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT Cyan couplers  
Magenta couplers  
Yellow couplers  
(**silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT **Photographic** developers  
(sulfonamidophenols; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT 197859-22-6 232949-74-5  
(developer; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT 211380-12-0P 252898-68-3P 252898-69-4P  
(in cyan coupler prepn.; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT 78-90-0, Propylenediamine 180200-97-9 186350-88-9  
(in cyan coupler prepn.; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development processes)
- IT 252898-58-1P 252898-60-5P  
(in magenta coupler prepn.; **silver halide color photog.** material contg. specific couplers for good coloring properties in both heat and wet development

- processes)
- IT 108-30-5, reactions 244763-83-5 252898-57-0 252898-59-2  
(in magenta coupler prepn.; **silver halide**  
color **photog.** material contg. specific couplers for  
good coloring properties in both heat and wet development  
processes)
- IT 252898-63-8P 252898-64-9P 252898-65-0P  
(in yellow coupler prepn.; **silver halide**  
color **photog.** material contg. specific couplers for  
good coloring properties in both heat and wet development  
processes)
- IT 627-18-9 4191-73-5, Isopropyl p-hydroxybenzoate 252898-62-7  
252898-66-1  
(in yellow coupler prepn.; **silver halide**  
color **photog.** material contg. specific couplers for  
good coloring properties in both heat and wet development  
processes)
- IT 180200-98-0 252898-71-8 252898-72-9 252898-73-0 252898-74-1  
252898-75-2 252898-76-3 252898-77-4 252898-78-5 252898-79-6  
252898-80-9 252898-81-0 252898-82-1 252898-83-2 252898-84-3  
**252898-85-4** 252898-86-5 252898-87-6 252898-88-7  
252898-89-8  
(**silver halide** color **photog.**  
material contg. specific couplers for good coloring properties in  
both heat and wet development processes)
- IT 252898-61-6P 252898-67-2P 252898-70-7P  
(**silver halide** color **photog.**  
material contg. specific couplers for good coloring properties in  
both heat and wet development processes)
- L26 ANSWER 2 OF 19 HCA COPYRIGHT 2003 ACS  
132:28628 **Silver halide** color **photographic**  
material using novel pyrrolotriazole-type cyan coupler. Yoshioka,  
Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
JP 11344793 A2 19991214 Heisei, 70 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1998-169303 19980602.

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- AB In the title **photog.** material possessing .gtoreq.1  
yellow-coloring, .gtoreq.1 magenta-coloring, and .gtoreq.1  
cyan-coloring photosensitive **Ag halide** emulsion  
layers and .gtoreq.1 non-photosensitive hydrophilic colloid layer on  
a support, .gtoreq.1 of the cyan-coloring layers contains (a)  
.gtoreq.1 cyan dye-forming coupler I [Za, Zb = :CR3, :N, either one  
is :N and the other :CR3; R1, R2 = electron-attracting group with  
Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of the  
.sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H, substituent; X

= H, group releasing upon coupling with an oxidized arom. primary amine color developing agent; when R1-3 and X are divalent groups, the compd. may link to form a (co)polymer], (b) a compd. II, and (c) a compd. III or IV [Ra1 and Ra2 are H, alkyl or aryl; Ra3, Ra4 = H, alkyl, aryl; Ra5 = aryl, the total C no. of Ra1-a5 is  $\geq 14$ ; X1, X2 = OH, alkoxy, NHR4 (R4 = H, alkyl, aryl; acyl, sulfonyl, carbamoyl, sulfamoyl, alkoxycarbonyl); Y1, Y2 = substituent; n, m = 0-4]. The material provides a high quality color image without color mixing.

IT 200049-64-5

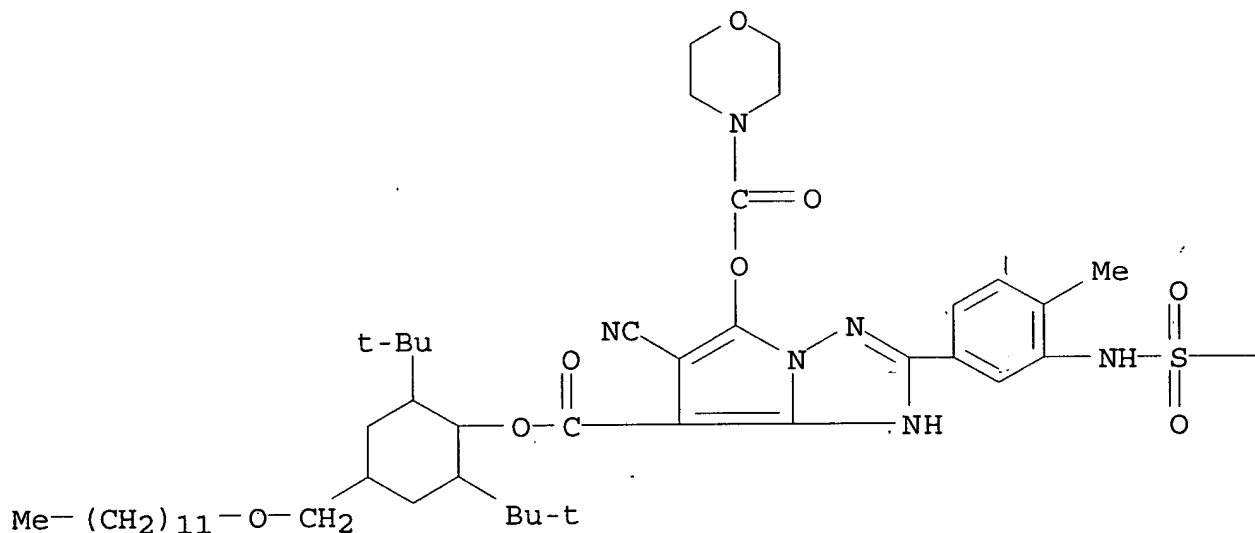
(photog. film contg. pyrrolotriazole deriv.

photog. cyan coupler, phenidone, and hydroquinone deriv.)

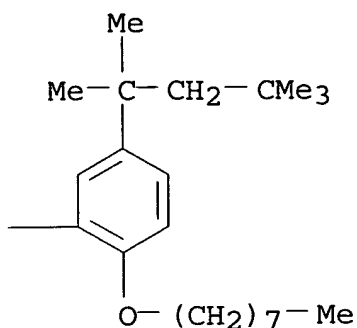
RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM G03C007-392  
ICS G03C007-38
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **photog** film cyan coupler pyrrolotriazole; phenidone deriv  
**photog** film; hydroquinone deriv **photog** film
- IT Cyan couplers  
Photographic films  
(**photog.** film contg. pyrrolotriazole deriv.  
**photog.** cyan coupler, phenidone, and hydroquinone deriv.)
- IT 190436-30-7P  
(bromination of; prepn. of pyrrolotriazole deriv. **photog**  
. cyan coupler)
- IT 200049-62-3 200049-64-5  
(**photog.** film contg. pyrrolotriazole deriv.  
**photog.** cyan coupler, phenidone, and hydroquinone deriv.)
- IT 903-19-5 5026-65-3 21182-65-0 80336-04-5 96048-53-2  
157367-05-0 211051-96-6 211052-27-6 220323-20-6 252208-87-0  
252208-88-1 252208-89-2  
(**photog.** film contg. pyrrolotriazole deriv.  
**photog.** cyan coupler, phenidone, and hydroquinone deriv.)
- IT 202483-63-4P  
(**photog.** film contg. pyrrolotriazole deriv.  
**photog.** cyan coupler, phenidone, and hydroquinone deriv.)
- IT 184947-09-9P 188745-52-0P  
(**photog.** film contg. pyrrolotriazole deriv.  
**photog.** cyan coupler, phenidone, and hydroquinone deriv.)
- IT 194419-30-2P 194419-31-3P  
(prepn. of pyrrolotriazole deriv. **photog.** cyan coupler)
- IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 25761-72-2, Diallylcarbamoyl chloride 163119-16-2,  
2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(prepn. of pyrrolotriazole deriv. **photog.** cyan coupler)

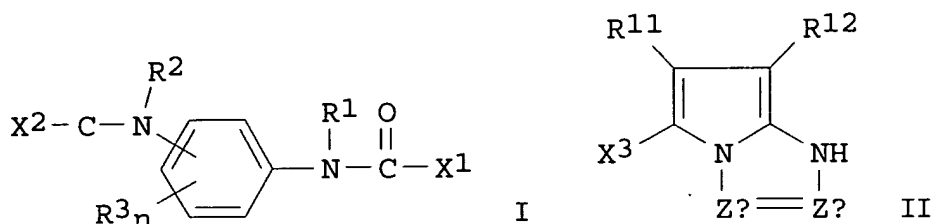


L26 ANSWER 3 OF 19 HCA COPYRIGHT 2003 ACS

131:279219 Silver halide color photographic

material containing bisurethane or bisureido compound. Mikoshiba, Takashi; Soejima, Susumu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11271940 A2 19991008 Heisei, 69 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-71020 19980319.

GI



AB The title **photog.** material, possessing .gtoreq.1 Ag halide emulsion layer on a support, contains .gtoreq.1 a compd. m-X2CONR2C6H4NR1COX1 (R1, R2 = H, aliph. group, aryl; X1, X2 = OR4, NR5R6; R4-6 = H, aliph. group, aryl, R1, R5, and R6 are not alkyl at the same time). The material may contain .gtoreq.1 a compd. I (R1, R2, R4, X1, and X2 are the same as defined for the above formula, resp.; R3 = H, substituent; R5, R6 = H, aliph. group, aryl; n = 0-4; this compd. has no ability of reacting with an oxidized color developing agent to form a dye) and .gtoreq.1 a cyan coupler II [Za, Zb = :CR13, :N, either one is :N and the other :CR13; R11, R12 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of .sigma.p values of R11 and R12 is .gtoreq.0.65; R13 = H, substituent; X3 = H, group releasing upon coupling with an oxidized arom. primary amine developing agent, R11-13 and X3 may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer]. The material shows improved coloring properties and storage stability and provides a high color quality **image** with improved lightfastness and without cyan stain.

IT 200049-64-5

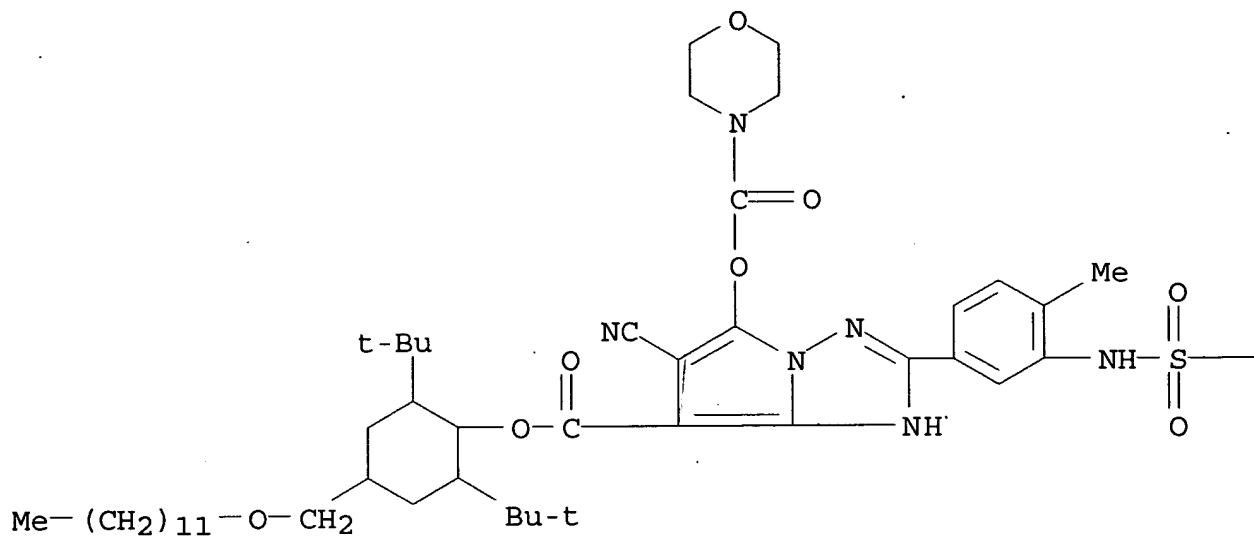
(silver halide color **photog.**

material contg. bisurethane or bisureido compd. and pyrolotriazole cyan coupler)

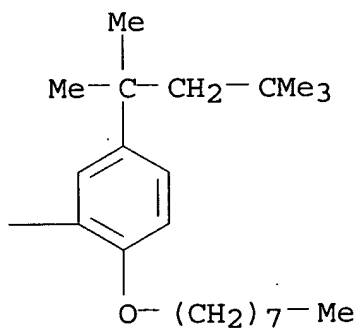
RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03C007-392  
ICS G03C007-38  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **silver halide photog** bisurethane  
bisureido; pyrolotriazole cyan coupler **silver  
halide photog**  
IT **Photographic emulsions**  
(color; **silver halide color photog.**  
material contg. bisurethane or bisureido compd. and

pyrrolotriazole cyan coupler)

IT Cyan couplers  
(silver halide color photog.  
material contg. bisurethane or bisureido compd. and  
pyrrolotriazole cyan coupler)

IT	126360-49-4	223564-71-4	245439-71-8	245439-72-9	245439-73-0
	245439-74-1	245439-75-2	245439-76-3	245439-78-5	245439-79-6
	245439-80-9	245439-81-0	245439-82-1	245439-83-2	245439-84-3
	245439-85-4	245439-86-5	245439-87-6	245439-88-7	245439-90-1
	245439-91-2	245439-92-3	245439-93-4	245439-94-5	245439-95-6
	245439-96-7	245439-97-8	245439-98-9		

(dispersion medium in coupler-contg. layer; silver  
halide color photog. material contg.  
bisurethane or bisureido compd. and pyrrolotriazole cyan coupler)

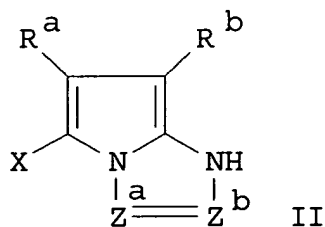
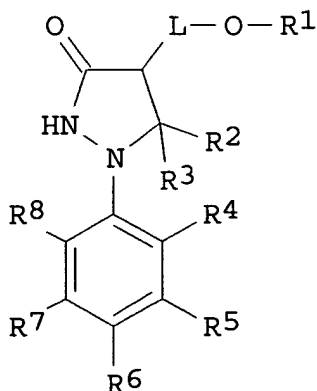
IT	143324-39-4	151019-64-6	153273-52-0	178743-91-4	179330-29-1
	184947-09-9	188745-52-0	200049-63-4	<b>200049-64-5</b>	
	200110-89-0	200110-90-3	200110-91-4	200137-20-8	200137-21-9
	200137-23-1	200216-40-6	211051-73-9	211051-76-2	217456-51-4
	245439-99-0	245440-00-0	245440-02-2	245440-03-3	245440-04-4
	245440-05-5	245440-06-6	245440-45-3		

(silver halide color photog.  
material contg. bisurethane or bisureido compd. and  
pyrrolotriazole cyan coupler)

L26 ANSWER 4 OF 19 HCA COPYRIGHT 2003 ACS

131:235677 Phenidone compound and silver halide  
color photographic paper containing the same. Mikoshiba,  
Takashi; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan).  
Jpn. Kokai Tokkyo Koho JP 11246785 A2 19990914 Heisei, 55  
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-49809  
19980302.

GI



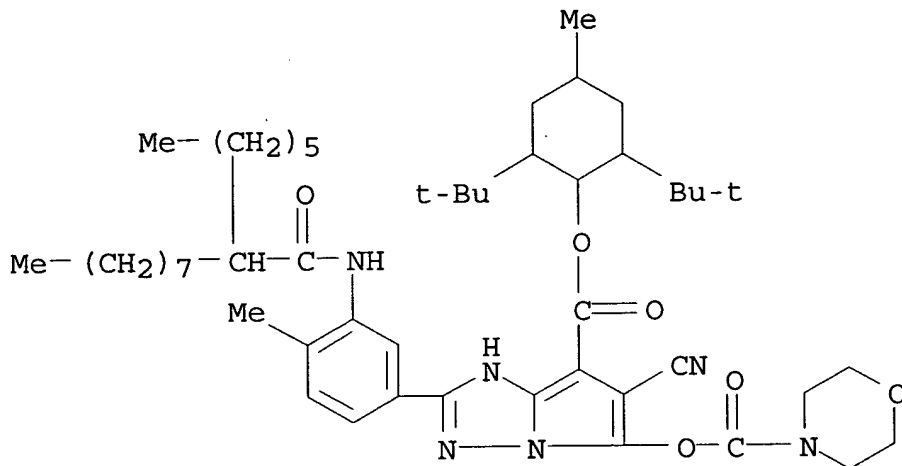
AB The Ag halide color photog. paper contains the phenidone compd. represented by a general formula I (L = alkylene; R1 = alkyl, aryl; R2, R3 = H, alkyl, aryl; R4-8 = H, substituent) and a cyan coupler represented by a general formula II (Za, Zb = -C(Rc):, -N:; Ra, Rb = electron withdrawing group having Hammett substituent const.  $\Delta p \geq 0.20$ ; Rc = H, substituent; X = H, coupling group). The photog. paper shows excellent color reprodn. and improved storage stability.

IT 200049-65-6 243986-82-5

(cyan coupler in silver halide color photog. paper)

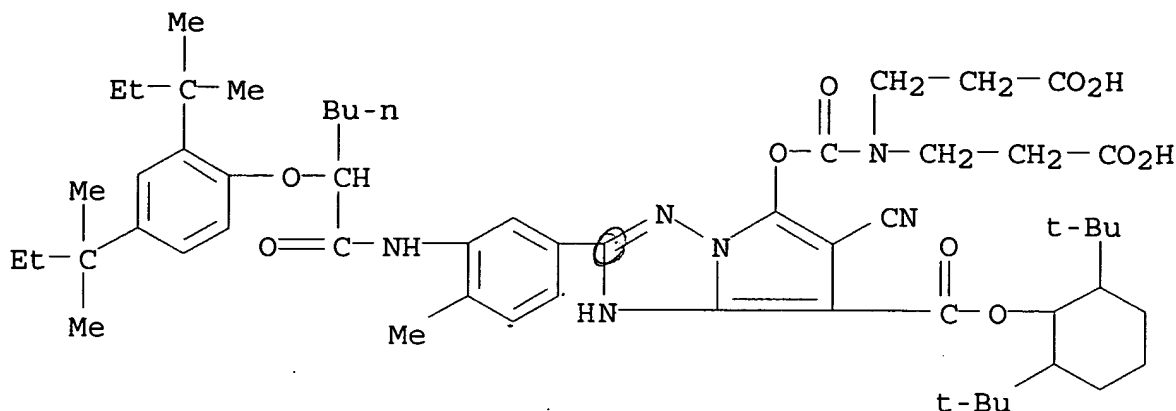
RN 200049-65-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



RN 243986-82-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[bis(2-carboxyethyl)amino]carbonyl]oxy]-2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxohexyl]amino]-4-methylphenyl]-6-cyano-, 7-[2,6-bis(1,1-dimethylethyl)cyclohexyl] ester (9CI) (CA INDEX NAME)



IC ICM C09B057-00  
ICS C07D231-08; C07D417-10; C07D487-04; G03C007-38; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

ST phenidone **silver halide color photog**  
paper cyan coupler

IT Color **photographic** paper  
Cyan couplers  
(phenidone compd. and **silver halide color**  
**photog.** paper contg. the same)

IT 143324-39-4 153273-52-0 184773-62-4 200049-62-3  
200049-65-6 200110-90-3 200110-96-9 200137-21-9  
200137-23-1 211051-73-9 211051-94-4 219553-72-7 220383-54-0  
243986-78-9 243986-79-0 243986-80-3 243986-81-4  
243986-82-5  
(cyan coupler in **silver halide color**  
**photog.** paper)

IT 184947-09-9P 188745-52-0P  
(cyan coupler in **silver halide color**  
**photog.** paper)

IT 243986-55-2 243986-56-3 243986-57-4 243986-58-5 243986-59-6  
243986-60-9 243986-61-0 243986-62-1 243986-63-2 243986-64-3  
243986-65-4 243986-66-5 243986-67-6 243986-68-7 243986-69-8  
243986-70-1 243986-71-2 243986-72-3 243986-73-4  
(phenidone compd. in **silver halide color**  
**photog.** paper)

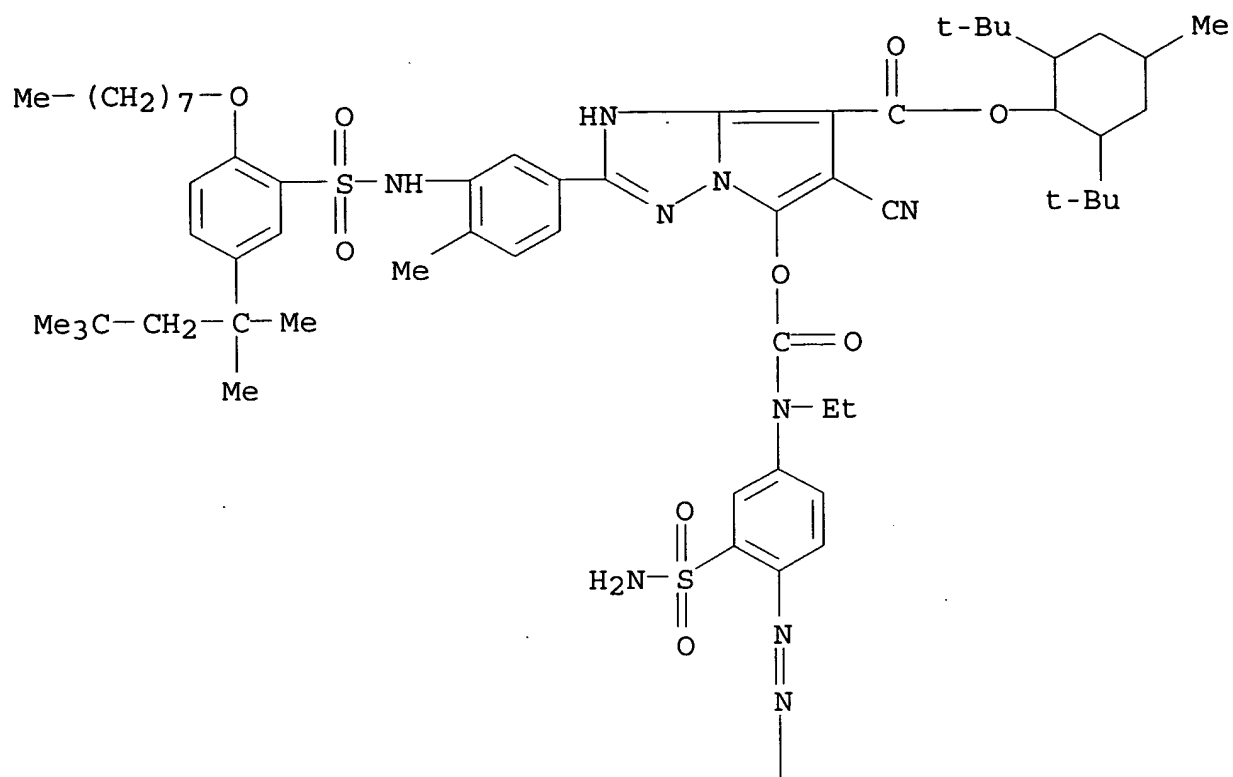
IT 243986-53-0P 243986-54-1P  
(phenidone compd. in **silver halide color**  
**photog.** paper)

IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions  
15159-40-7, Morpholinocarbonyl chloride 25761-72-2,  
Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-  
methylcyclohexanol 194419-32-4  
(prepn. of cyan coupler for **silver halide**  
**color photog.** paper)

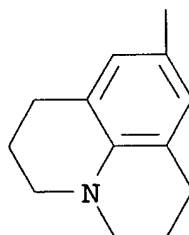
IT 200111-47-3P 200111-48-4P 200111-49-5P 243986-83-6P

- (prepn. of cyan coupler for silver halide color photog. paper)
- IT 50-00-0, Formaldehyde, reactions 64-17-5, Ethanol, reactions 95-92-1, Diethyl oxalate 100-63-0, Phenylhydrazine 141-52-6, Sodium ethoxide 50772-35-5 243986-77-8  
(prepn. of phenidone compd. for silver halide color photog. paper)
- IT 243986-74-5P 243986-75-6P 243986-76-7P  
(prepn. of phenidone compd. for silver halide color photog. paper)
- L26 ANSWER 5 OF 19 HCA COPYRIGHT 2003 ACS
- 131:206897 Color photographic film, manufacture of color filter using the same, and color filter for display. Mizukawa, Hiroki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11231481 A2 19990827 Heisei, 73 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1998-28943 19980210.
- AB The color photog. film contains a yellow-colored cyan coupler Q1-(TIME)n-L1m-(YDYE) [Q1 = cyan dye forming coupler residue; TIME = timing group; L1 = divalent connection group; YDYE = yellow dye residue; n, m = 0-3] or A1-N:N-R1 [A1 = cyan dye forming coupler residue; R1 = aryl, heterocycle], a magenta-colored cyan coupler Q2-(TIME)n-L2m-(MDYE) [Q2 = cyan dye forming coupler residue; TIME = timing group; L2 = divalent connection group; MDYE = magenta dye residue; m, n = 0-3] or A2-N:N-R2 [A2 = cyan dye forming coupler residue; R2 = aryl, heterocycle], and a yellow-colored magenta coupler Q3-(TIME)n-L3m-(YDYE) [Q3 = magenta dye forming coupler residue; TIME = timing group; L3 = divalent connection group; YDYE = yellow dye residue; n, m = 0-3] or A3-N:N-R3 [A3 = magenta dye forming coupler residue; R3 = aryl, heterocycle]. The excellent color filter is obtained easily by using the above colored couplers.
- IT 240812-14-0  
(magenta-colored cyan coupler in color photog. film for manufg. color filter of display)
- RN 240812-14-0 HCA
- CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[3-(aminosulfonyl)-4-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)azo]phenyl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,4-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



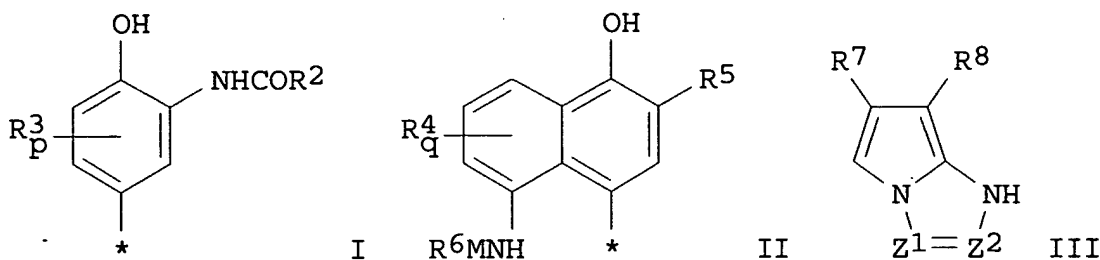
IC ICM G03C007-333  
 ICS G02B005-20; G03C005-08; G03C007-20  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
 Other Reprographic Processes)  
 Section cross-reference(s): 73  
 IT 240812-11-7 240812-12-8 240812-13-9 240812-14-0  
 240812-15-1  
 (magenta-colored cyan coupler in color photog. film for manufg.  
 color filter of display)

L26 ANSWER 6 OF 19 HCA COPYRIGHT 2003 ACS

130:344973 Silver halide photographic

material for color filter formation. Mizukawa, Hiroki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109123 A2 19990423 Heisei, 48 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-267112 19970930.

GI



AB The material contains a red dye- or a magenta dye-releasing coupler having a formula Q<sub>1</sub>(TIME)<sub>n</sub>LmDY or a red or magenta colored coupler having a formula Q<sub>2</sub>N:NR<sub>1</sub> [Q<sub>1</sub>, 2 = coupler residue I, II, or III; TIME = timing group that releases (TIME)<sub>n-1</sub>LmDY after eliminating Q<sub>1</sub> or timing group that releases (TIME)<sub>n-2</sub>LmDY after being eliminated from TIME; R<sub>1</sub> = aryl, heterocyclic; n, m = 0, 1, 2, 3; L = divalent group; DY = red or magenta dye residue; R<sub>2</sub> = alkyl, cycloalkyl, alkenyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, alkenyloxy, aryloxy, alkylamino, cycloalkylamino, alkenylamino, arylamino, heterocyclic amino; R<sub>3</sub>, 4 = substituent; p = 0-3 integer; R<sub>5</sub>, 7, 8 = H, substituent; q = 0-4 integer; M = CO, SO<sub>2</sub>; R<sub>6</sub> = alkyl, cycloalkyl, aryl, heterocyclic, alkoxy, cycloalkyloxy, aryloxy, heterocycloxy, alkylamino, cycloalkylamino, arylamino, heterocyclic amino; Z<sub>1</sub>, 2 = N, CR<sub>9</sub>; R<sub>9</sub> = H, alkyl, cycloalkyl, alkenyl, aryl, heterocyclic]. The method involves exposing the material, color-developing, and desilverizing to obtain the filter having a blue, green, and red pixel pattern. The filter contains the coupler. The filter with light transmittance, excellent heat and light fastness, and thin film thickness is manufd. using the material.

IT 223734-81-4 224045-18-5 224045-35-6

(Ag halide photog. material for  
color filter contg. red or magenta coupler)

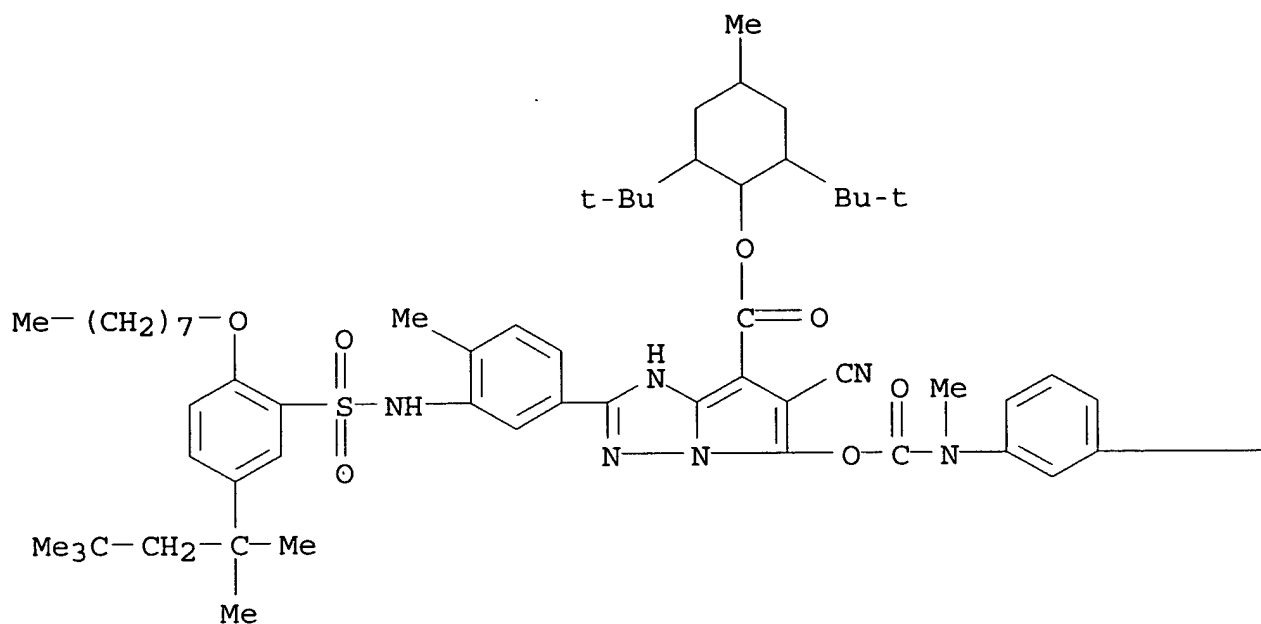
RN 223734-81-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
5-(2-benzothiazolylazo)-2-[3-[[[7-[[[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl]oxy]carbonyl]-6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]aminophenyl]-1H-pyrrolo[1,2-b][1,2,4]triazol-5-yl]oxy]carbonyl]methylamino]phenyl]-6-

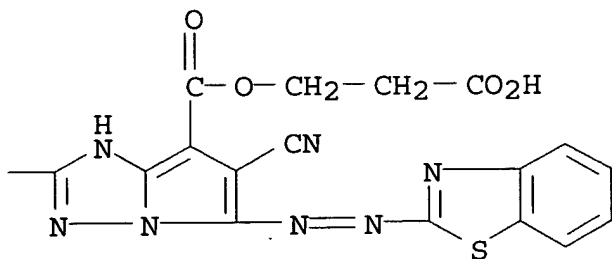


cyano-, 2-carboxyethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

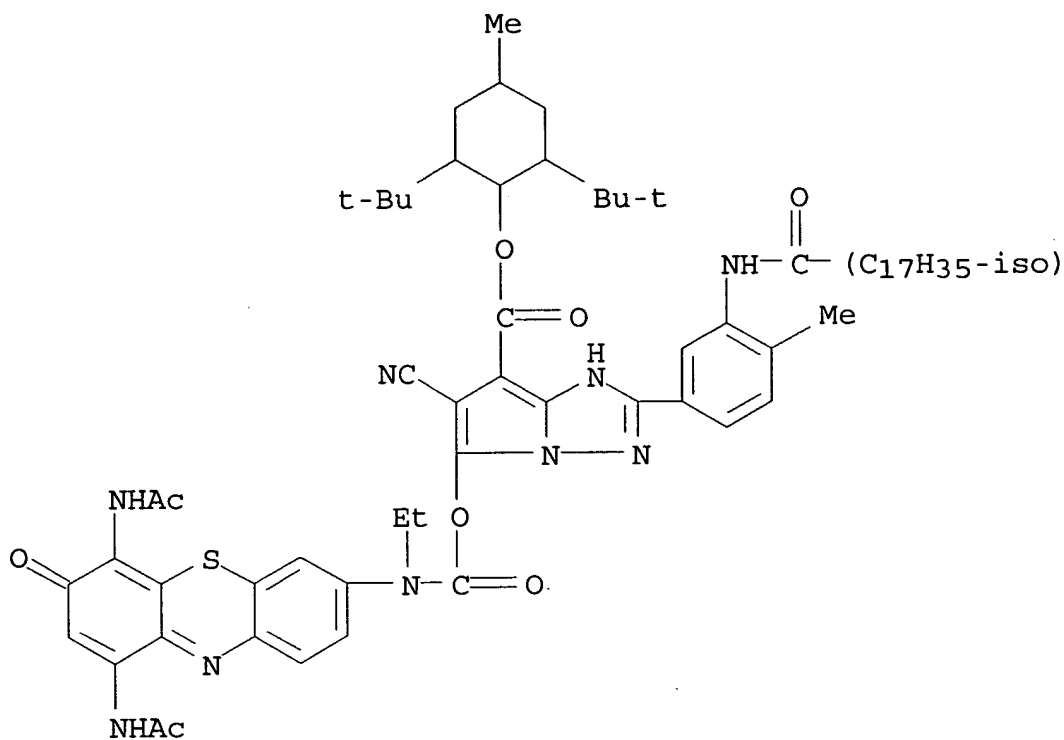


PAGE 1-B

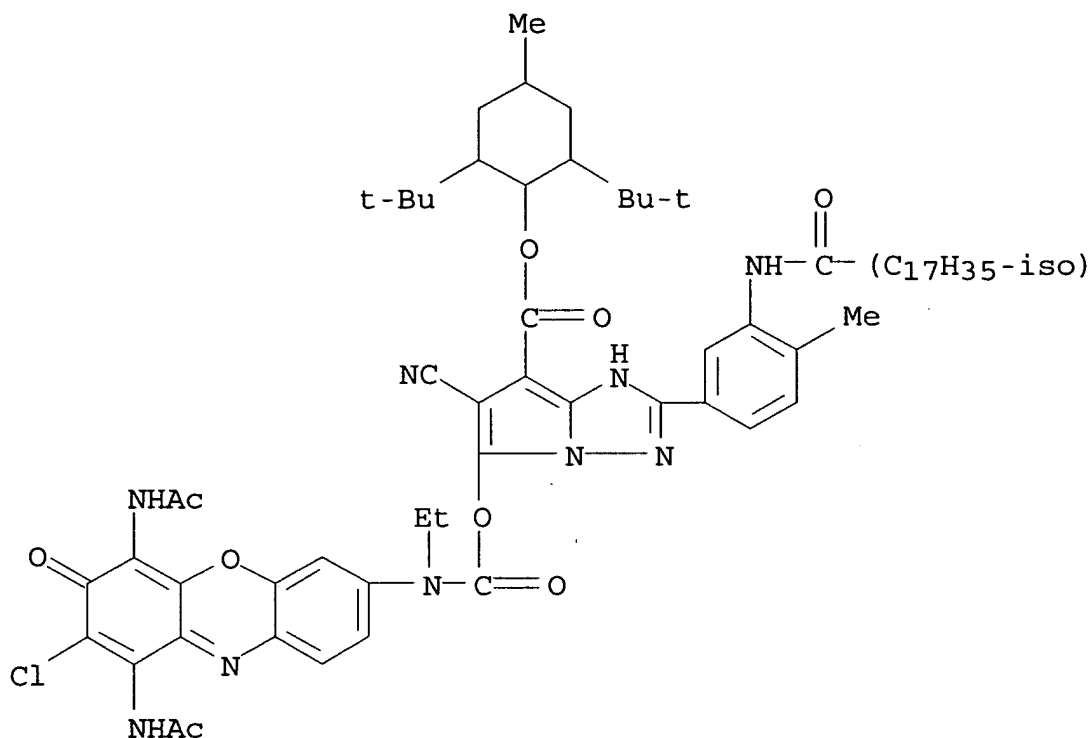


RN 224045-18-5 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

5-[[[1,4-bis(acetylamino)-3-oxo-3H-phenothiazin-7-yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



RN 224045-35-6 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 5-[[[1,4-bis(acetylamino)-2-chloro-3-oxo-3H-phenoxazin-7-yl]ethylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxoisooctadecyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G02B005-20  
 ICS G02B005-22; G03C007-20; G03C007-333; G03C007-34; G03C007-38;  
 G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)

ST **photog** material color filter magenta coupler; red coupler  
 color filter photo material

IT Optical filters  
 Photographic films  
 (Ag halide photog. material for  
 color filter contg. red or magenta coupler)

IT 223734-74-5P  
 (Ag halide photog. material for  
 color filter contg. red or magenta coupler)

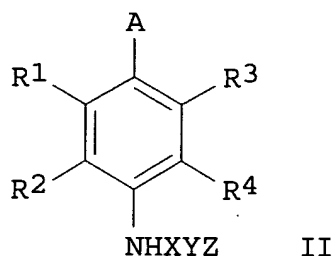
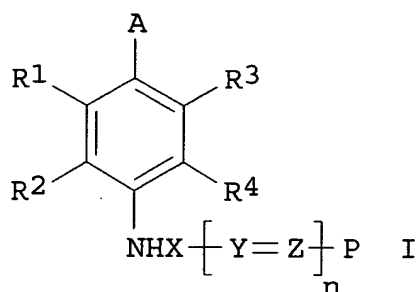
IT 35675-46-8 73164-51-9 194419-31-3 223734-71-2  
 (Ag halide photog. material for  
 color filter contg. red or magenta coupler)

IT 223734-69-8P 223734-70-1P 223734-72-3P  
 (Ag halide photog. material for  
 color filter contg. red or magenta coupler)

IT 223734-73-4 223734-75-6 223734-76-7 223734-77-8 223734-78-9  
 223734-79-0 223734-80-3 223734-81-4 224045-18-5  
 224045-35-6  
 (Ag halide photog. material for  
 color filter contg. red or magenta coupler)

L26 ANSWER 7 OF 19 HCA COPYRIGHT 2003 ACS  
 130:59003 **Silver halide** color diffusion-transfer  
**photographic** material containing dye-scavenging polymer to  
 improve whiteness of background. Taguchi, Toshiki (Fuji Photo Film  
 Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10301246 A2  
 19981113 Heisei, 68 pp. (Japanese). CODEN: JKXXAF.  
 APPLICATION: JP 1997-118898 19970422.

GI



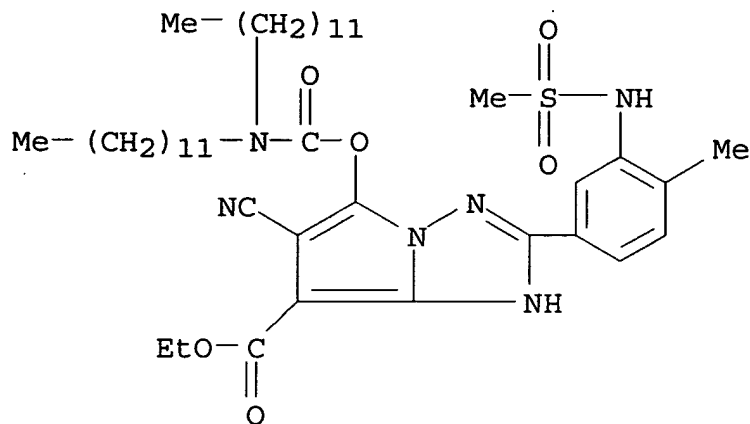
AB The **photog.** material contg. a **photog. Ag halide**, a binder, a chromogenic coupler, and a developing agent selected from I (R1-5 = H, substituent; A = OH, substituted amino; X = polyvalent linkage selected from CO, SO, SO2 PO:; Y, Z = N, CR5:; n .gtoreq.0; P = proton-releasing group or cationic group) and II (Y = bivalent linkage; Z = nucleophile) is characterized by incorporation of a scavenger which traps diffusible colorant present in the developing environment. Preferable scavenger is vinyl polymers having an onium group. The material gives **images** with good background whiteness due to the scavenger.

IT 217088-50-1

(cyan coupler; **silver halide** color  
 diffusion-transfer **photog.** material contg.  
 dye-scavenging polymer to improve whiteness of background)

RN 217088-50-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-5-[[[didodecylamino)carbonyl]oxy]-2-[4-methyl-3-  
 [(methylsulfonyl)amino]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



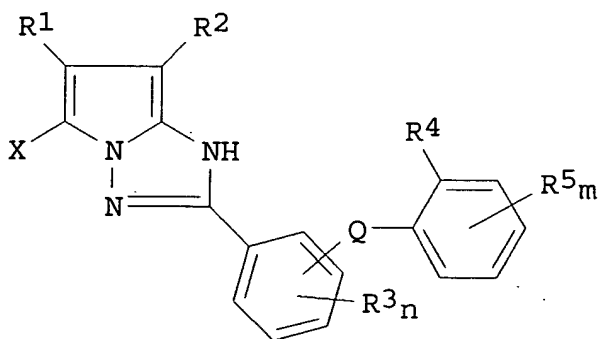
- IC ICM G03C008-36  
ICS G03C008-40; G03C008-52
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST diffusion transfer **photog** film color; dye scavenger onium  
diffusion transfer **photog**; onium polymer scavenger  
**photog** material; redn additive color **photog**  
material
- IT Diffusion-transfer **photographic** films  
(color; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 217088-50-1  
(cyan coupler; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 217088-47-6 217088-48-7 217088-49-8  
(developer; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 209794-95-6P 209794-98-9P 213608-77-6P 213608-81-2P  
(developer; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 182640-41-1 189759-41-9 217088-54-5 217088-56-7 217088-58-9  
(dye scavenger; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 217088-51-2  
(magenta coupler; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)
- IT 209794-96-7P 217088-59-0P  
(redn. of; **silver halide** color  
diffusion-transfer **photog.** material contg.  
dye-scavenging polymer to improve whiteness of background)

- IT 152243-21-5P 189188-01-0P 189188-02-1P 209794-94-5P  
 209794-97-8P 217088-60-3P  
 (silver halide color diffusion-transfer  
 photog. material contg. dye-scavenging polymer to improve  
 whiteness of background)
- IT 81-08-3, o-Sulfobenzoic anhydride 111-92-2, Dibutylamine  
 112-96-9, Octadecyl isocyanate 121-57-3 501-24-6,  
 m-Pentadecylphenol 1694-92-4, o-Nitrobenzenesulfonyl chloride  
 5930-28-9, 2,6-Dichloro-4-aminophenol 7632-00-0, Sodium nitrite  
 10025-87-3, Phosphorus oxychloride 24974-75-2 34630-52-9,  
 Lauryloxypropylamine 41755-73-1 74918-57-3, 2-Hexyldecanoyl  
 chloride  
 (silver halide color diffusion-transfer  
 photog. material contg. dye-scavenging polymer to improve  
 whiteness of background)
- IT 217088-52-3  
 (yellow coupler; silver halide color  
 diffusion-transfer photog. material contg.  
 dye-scavenging polymer to improve whiteness of background)

L26 ANSWER 8 OF 19 HCA COPYRIGHT 2003 ACS

129:182044 Silver halide color photographic  
 material. Ito, Takayuki; Matsuoka, Mitsuyuki; Shimata, Yasuhiro;  
 Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai  
 Tokyo Koho JP 10198012 A2 19980731 Heisei, 46 pp.  
 (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-260172 19970925.  
 PRIORITY: JP 1996-318564 19961115.

GI

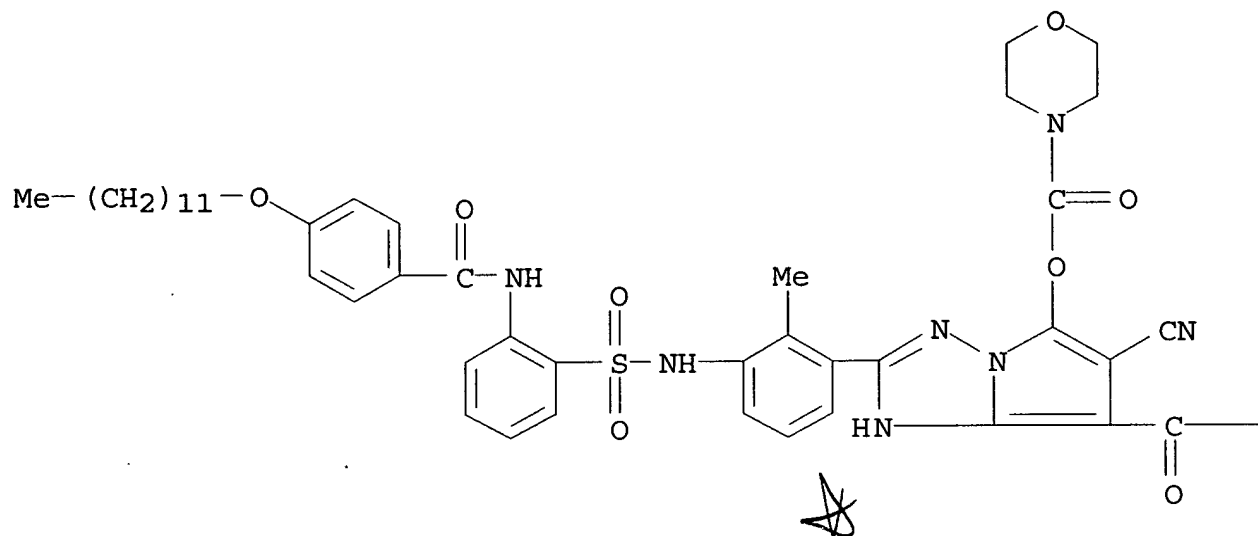


- AB The Ag halide color photog. material  
 comprises a coupler I (R1,2 = electron-withdrawing group with  
 Hammett's substituent const. 0.2.ltoreq..sigma.p.ltoreq.1.0; R3 =  
 substituent; n = 0-4; Q = NHCO, NHSO2, CONH, etc.; R4 = NHCOH, etc.;  
 R5 = substituent; m = 0-4; X = coupling off group) in at least  
 .gtoreq.1 layer formed on a support. The coupler showed good  
 coor-forming property even at a low oil content.
- IT 211380-21-1

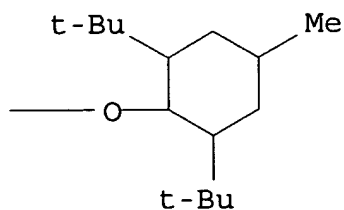
(coupler contained in silver halide color  
photog. material)

RN 211380-21-1 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[3-[[[2-[[4-(dodecyloxy)benzoyl]amino]phenyl]sulfonyl]amino]-2-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-,  
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX  
NAME)

PAGE 1-A



PAGE 1-B

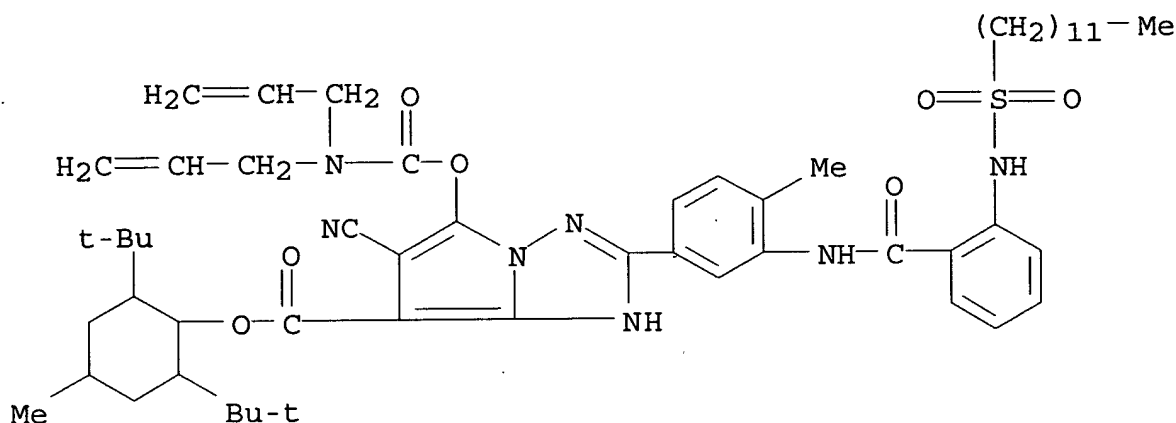


IT 211380-15-3P

(coupler contained in silver halide color photog. material)

RN 211380-15-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[[(di-2-propenylamino)carbonyl]oxy]-2-[3-[[2-[(dodecylsulfonyl)amino]benzoyl]amino]-4-methylphenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

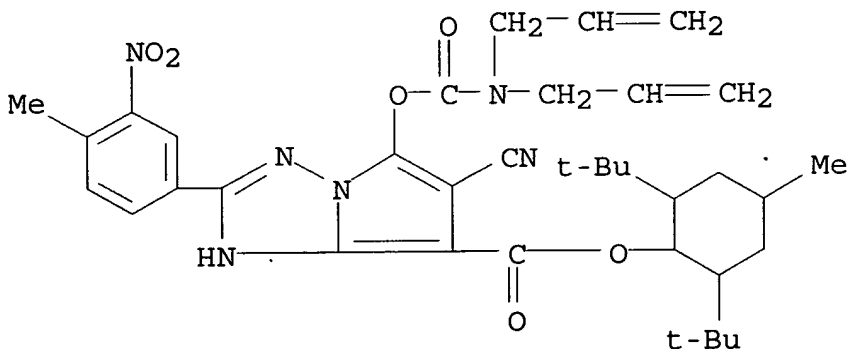


IT 211380-18-6P 211380-19-7P

(coupler contained in silver halide color photog. material)

RN 211380-18-6 HCA

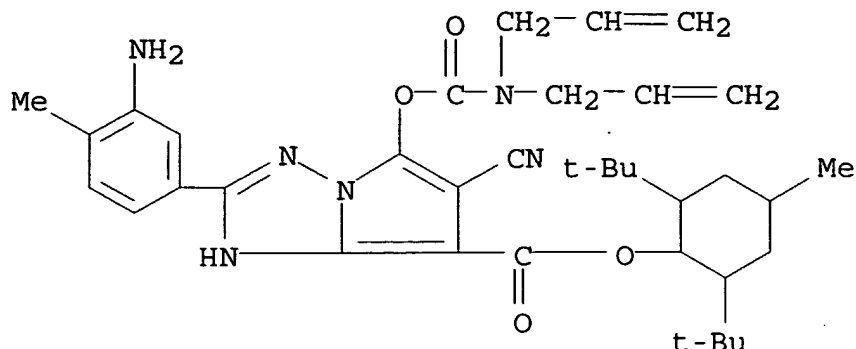
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[[(di-2-propenylamino)carbonyl]oxy]-2-(4-methyl-3-nitrophenyl)-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



RN 211380-19-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-(3-amino-4-methylphenyl)-6-cyano-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



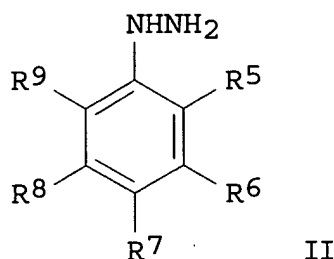
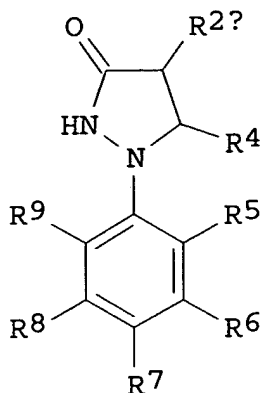


IC ICM G03C007-38  
ICS G03C001-00; G03C007-00  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **silver halide color photog material;**  
coupler **silver halide color photog**  
IT **Photographic couplers**  
(**silver halide color photog.**  
material)  
IT 211380-20-0 211380-21-1 211380-22-2  
(coupler contained in **silver halide color**  
**photog.** material)  
IT 211380-10-8P 211380-15-3P  
(coupler contained in **silver halide color**  
**photog.** material)  
IT 939-79-7  
(coupler contained in **silver halide color**  
**photog.** material)  
IT 166522-39-0P 180200-92-4P 180200-96-8P 180200-97-9P  
211380-11-9P 211380-12-0P 211380-13-1P 211380-14-2P  
211380-16-4P 211380-17-5P 211380-18-6P  
211380-19-7P  
(coupler contained in **silver halide color**  
**photog.** material)

L26 ANSWER 9 OF 19 HCA COPYRIGHT 2003 ACS

129:168037 **Silver halide color photographic**  
material, phenidone compounds used therefor, and process for  
preparing the same. Mikoshiba, Hisashi; Yoshioka, Yasuhiro;  
Soejima, Shin; Takahashi, Osamu; Saito, Naoki; Morigaki, Masakazu  
(Fuji Photo Film Co., Ltd., Japan). PCT Int. Appl. WO 9833760 A1  
19980806, 162 pp. DESIGNATED STATES: W: CN, JP, US; RW:  
AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE.  
(Japanese). CODEN: PIXXD2. APPLICATION: WO 1998-JP432 19980202.  
PRIORITY: JP 1997-20816 19970203; JP 1997-140719 19970529; JP  
1997-195881 19970722.

GI



AB Claimed is a **silver halide color photog**  
 . material improved in the fastness of a color **image**,  
 color reprodn., cyan stain, cyan color mixing at the time of  
 processing, and the like by the combined use of a phenidone compd.  
 having a particular structure, such as one represented by general  
 formula (I; R4 = H, C1-30 alkyl, C6-20 aryl; R2a = C1-30 alkyl or  
 alkenyl; R5 - R9 = H, alkyl, aryl, alkoxy, aryloxy, NH2, alkylamino,  
 arylamino, acylamino, aminocarbonylamino, alkoxy carbonylamino,  
 arylcarbonylamino, alkoxy carbonyl, aryloxy carbonyl, sulfonyl,  
 sulfonylamino, halo, OH, CO2H, heterocyclyl, SO2NH2, CONH2, azo,  
 alkylthio, arylthio, imido, sulfinyl, phosphonyl, acyl) and a  
 pyrrolotriazole cyan coupler. The phenidone compds. I can be prepd.  
 at a low cost on a com. scale by reacting an .alpha.-alkyl- or  
 alkenylacrylic ester of formula R4HC:CR2aCO2R3 (R2a, R4 = same as  
 above) with a phenylhydrazine compd. represented by general formula  
 (II; R5 - R9 = same as above). Thus, a soln. of 74.04 mmol  
 CH2:C(C16H33-n)CO2Me in toluene was dropwise to a stirred mixt. of  
 67.0 mmol phenylhydrazine and 73.7 mmol NaOMe at 100.degree. and the  
 resulting mixt. was allowed to react at 100.degree. for 30 min to  
 give I (R2a = C16H33-n, R4 - R9 = H) (III). A color **photog**  
 . paper contg. III, a cyan coupler (IV), a hindered amine (V) showed  
 cyan stain .DELTA.D of 0.01, good color reprodn., and 91%  
 photostability (residual ratio).

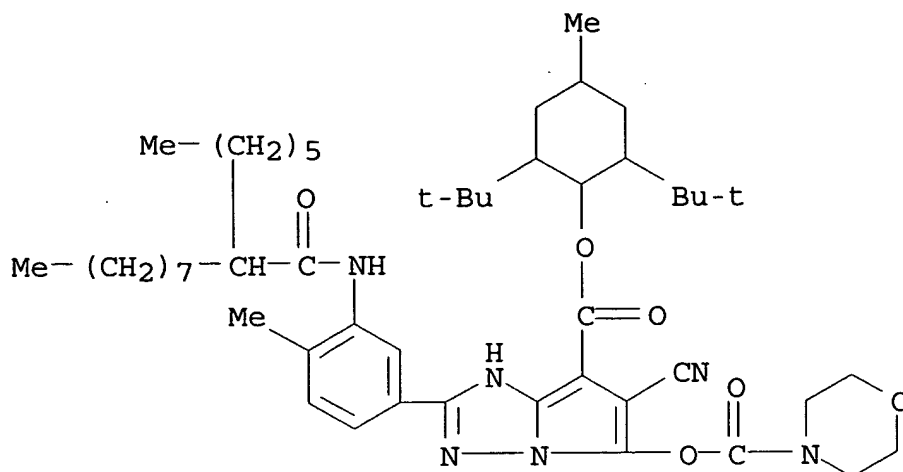
IT 200049-65-6 211051-85-3

(**silver halide color photog.**

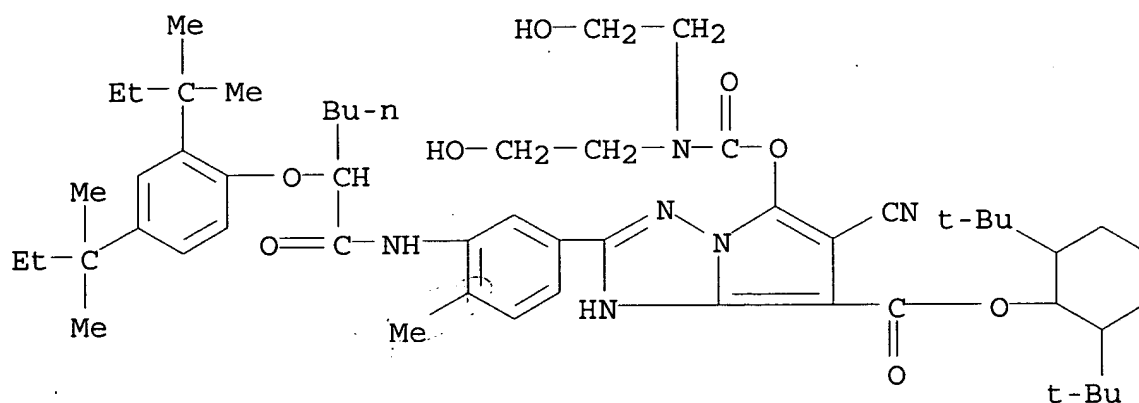
material contg. phenidone compds. and pyrrolotriazole cyan  
 couplers)

RN 200049-65-6 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-  
 morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
 methylcyclohexyl ester (9CI) (CA INDEX NAME)



RN 211051-85-3 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxohexyl]amino]-4-  
 methylphenyl]-5-[[[bis(2-hydroxyethyl)amino]carbonyl]oxy]-6-cyano-,  
 2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM C07C069-533  
 ICS C07D231-08; G03C007-392  
 CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 ST color **photog** paper; **Silver halide**  
 color **photog** emulsion; fastness color **image**  
 improved; cyan stain color reprodn improved; pyrrolotriazole cyan  
 coupler; phenidone compd prepn; phenylhydrazine cyclocondensation  
 alkenylacrylic ester; alkylacrylic ester cyclocondensation  
 phenylhydrazine  
 IT Cyan couplers  
 Photographic couplers  
 Photographic emulsions

**Photographic paper****(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 202483-63-4P 211051-27-3P 211051-31-9P 211051-36-4P  
 211051-40-0P 211051-44-4P 211051-47-7P 211051-49-9P  
 211051-52-4P 211051-54-6P 211051-57-9P 211051-59-1P  
 211051-96-6P 211051-97-7P 211051-99-9P 211052-01-6P  
 211052-03-8P 211052-05-0P 211052-07-2P 211052-09-4P  
 211052-11-8P 211052-13-0P 211052-15-2P 211052-17-4P  
 211052-19-6P 211052-21-0P 211052-23-2P 211052-25-4P  
 211052-27-6P 211052-29-8P 211052-31-2P 211052-32-3P  
 211052-35-6P 211052-37-8P 211052-39-0P 211052-41-4P  
 211052-43-6P 232947-66-9P 361177-83-5P 361177-92-6P  
 361181-22-8P

**(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 2516-92-9 122586-52-1 122616-76-6 158779-09-0 200216-42-8  
 200216-44-0 200216-55-3 200357-97-7 211052-45-8 211052-47-0  
 211052-51-6 211052-54-9 211052-58-3 211052-60-7 211052-62-9  
 211052-64-1 211102-31-7

**(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 153273-52-0 179330-29-1 184773-62-4 184947-09-9 188745-52-0  
 200049-63-4 200049-65-6 200110-90-3 200137-20-8  
 200137-21-9 200137-23-1 211051-70-6 211051-73-9 211051-76-2  
 211051-85-3 211051-92-2 211051-94-4

**(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 50-00-0, Formaldehyde, reactions 95-92-1, Diethyl oxalate  
 100-63-0, Phenylhydrazine 108-59-8, Dimethyl malonate 112-61-8,  
 Methyl octadecanoate 112-82-3, 1-Bromohexadecane 553-90-2,  
 Dimethyl oxalate 554-84-7, 3-Nitrophenol 628-97-7, Ethyl  
 hexadecanoate 759-65-9 1590-53-0, 3-(n-Hexadecyloxy)phenylhydrazine hydrochloride 1806-72-0 23130-42-9,  
 Dimethyl n-hexadecylmalonate 53633-31-1, n-Hexadecylmalonic acid  
 monomethyl ester 211052-72-1, 3-(n-Hexadecyloxy)aniline  
 hydrochloride

**(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

IT 53633-32-2P 123633-21-6P 211052-69-6P

**(silver halide color photog.**

material contg. phenidone compds. and pyrrolotriazole cyan couplers)

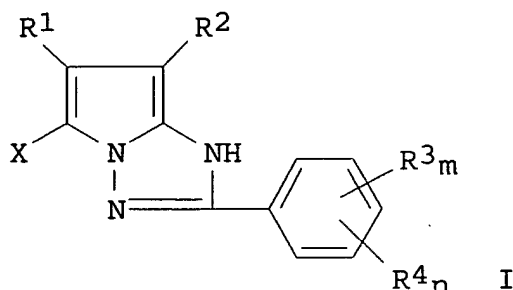
L26 ANSWER 10 OF 19 HCA COPYRIGHT 2003 ACS

129:87954 Silver halide color photographic

material containing pyrrolotriazole cyan coupler. Ito, Takayuki;

Matsuoka, Mitsuyuki; Shimada, Yasuhiro; Shimura, Yoshio; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10142759 A2 19980529 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-304415 19961115.

GI



AB The color **photog.** material has .gtoreq.1 layer contg. a pyrrolotriazole coupler I [R1, R2 = electron-withdrawing group with Hammett's .sigma..rho. 0.2-1.0; R3 = NHCOR31, NHSO2R32, CONHR33; R31 = H, alkyl, aryl, heterocycle, alkyloxy, aryloxy; R32, R33 = alkyl, aryl, heterocycle; R4 = substituent; n = 0-(5-m); m = 2-5; X = H, leaving group to be released by the coupling reaction with the oxidized developing agent] on a support. The coupler has good developability even at low solvent ratio and good stability from leuco cyan dye problem. The **photog.** material incorporating the coupler has consistent color reprodn. quality. Preferable application of the coupler is to multilayer color reversal films. Suitable couplers are I [R1 = CN, R2 = 2,6-dibutyl-4-methyl-phenoxy-carbonyl, R3 = 2,5-di(octyloxy-5-hydroxy-phenylsulfoamino), R4 = 4-Me].

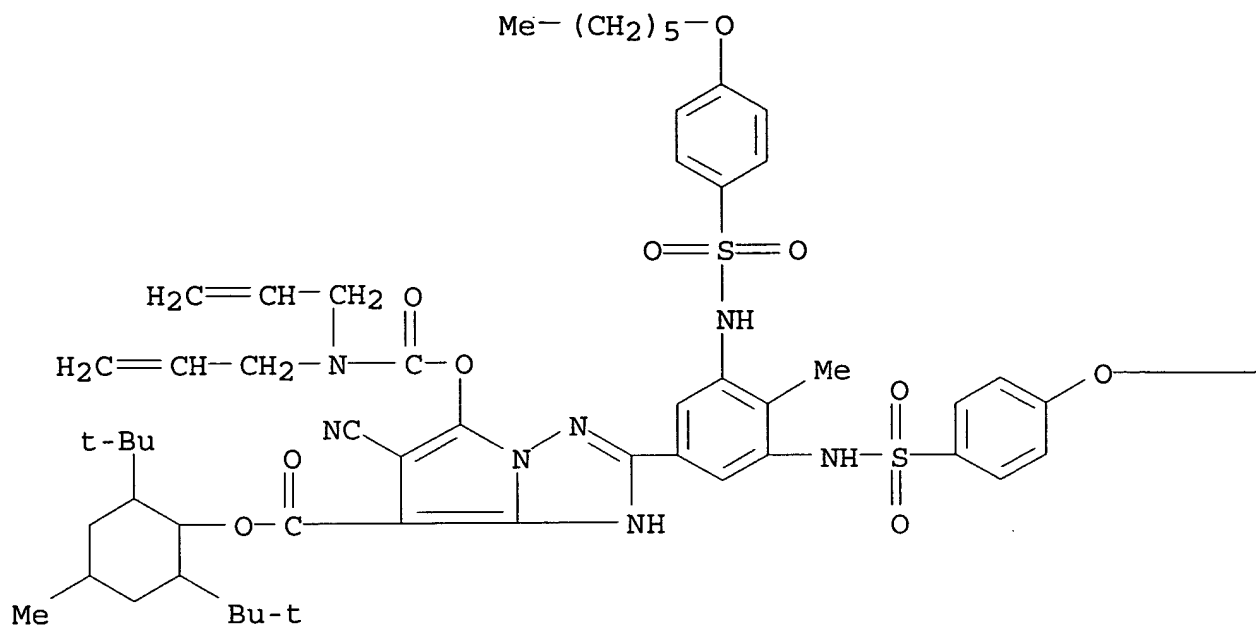
IT 209341-85-5

(cyan coupler; **silver halide** color**photog.** material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

RN 209341-85-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
2-[3,5-bis[[[4-(hexyloxy)phenyl]sulfonyl]amino]-4-methylphenyl]-6-cyano-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— (CH<sub>2</sub>)<sub>5</sub>—Me

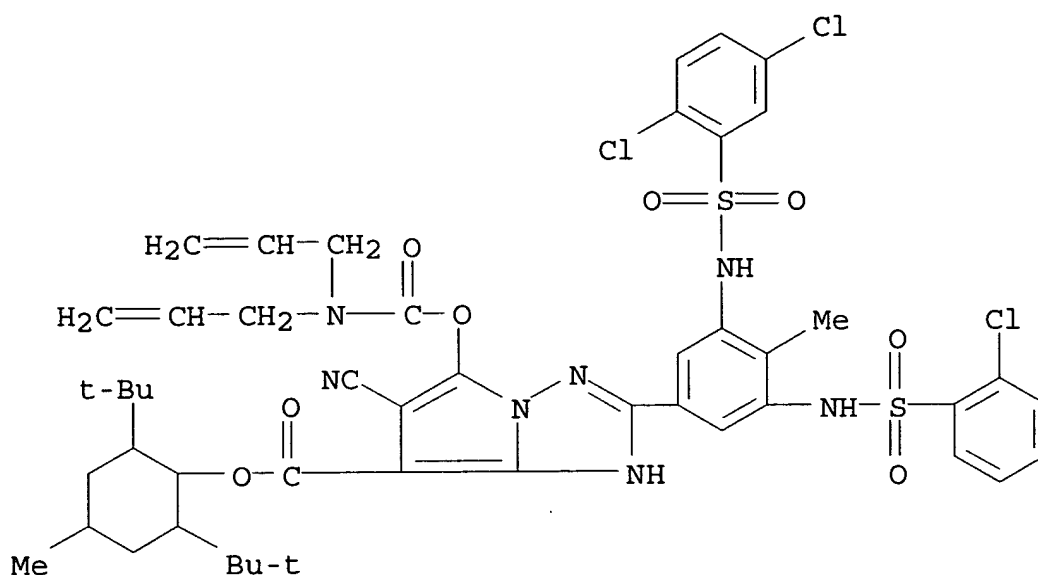
IT 209341-82-2P

(cyan coupler; **silver halide** color**photog.** material contg. pyrrolo[1,2-b][1,2,4]triazole cyan coupler to  
improve color developability and safety from leuco cyan dye)

RN 209341-82-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
2-[3-[[[(2-chlorophenyl)sulfonyl]amino]-5-[[[(2,5-  
dichlorophenyl)sulfonyl]amino]-4-methylphenyl]-6-cyano-5-[[[(di-2-  
propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-

methylcyclohexyl ester (9CI) (CA INDEX NAME)



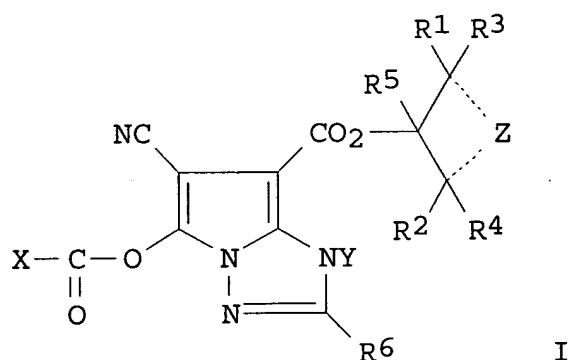
- IC ICM G03C007-38  
ICS G03C007-00
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST pyrrolotriazole cyan coupler color **photog** material;  
triazole cyan coupler color **photog** material; chromogenic  
development acetanilide coupler color **photog**
- IT **Photographic** films  
(color, reversal; **silver halide** color  
**photog.** material contg. pyrrolotriazole cyan coupler to  
improve color developability and safety from leuco cyan dye)
- IT **Photographic** films  
(color; **silver halide** color **photog.**  
material contg. pyrrolotriazole cyan coupler to improve color  
developability and safety from leuco cyan dye)
- IT Cyan couplers  
(**silver halide** color **photog.**  
material contg. pyrrolotriazole cyan coupler to improve color  
developability and safety from leuco cyan dye)
- IT 209341-89-9P 209341-96-8P  
(bromination of; **silver halide** color  
**photog.** material contg. pyrrolotriazole cyan coupler to  
improve color developability and safety from leuco cyan dye)
- IT 209341-83-3 209341-84-4 209341-85-5  
(cyan coupler; **silver halide** color  
**photog.** material contg. pyrrolotriazole cyan coupler to  
improve color developability and safety from leuco cyan dye)
- IT 209341-81-1P 209341-82-2P  
(cyan coupler; **silver halide** color  
**photog.** material contg. pyrrolotriazole cyan coupler to

- improve color developability and safety from leuco cyan dye)
- IT 209341-93-5P  
(redn. of; **silver halide color photog**  
material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)
- IT 5402-73-3P, 2,5-Dichlorobenzenesulfonyl chloride 209341-86-6P  
209341-87-7P 209341-88-8P 209341-91-3P 209341-94-6P  
209341-95-7P 209341-97-9P  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)
- IT 302-01-2, Hydrazine, reactions 5400-86-2 27317-59-5  
163119-16-2 209341-92-4  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler to improve color developability and safety from leuco cyan dye)

L26 ANSWER 11 OF 19 HCA COPYRIGHT 2003 ACS

129:10563 **Silver halide color photographic**  
photosensitive material and **image** forming method using  
same. Kawai, Kiyoshi (Fuji Photo Film Co., Ltd., Japan). Jpn.  
Kokai Tokkyo Koho JP 10097040 A2 **19980414** Heisei, 51 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-158764 19970616.  
PRIORITY: JP 1996-154622 19960614.

GI



AB The **photog.** material comprises at least three different **silver halide** emulsion layers having different color sensitivity among them, and a hydrophilic colloidal layer, wherein the cyan coupler **silver halide** emulsion layer comprises pigment forming coupler I ( R1-5 = H, substituent; Z = ring forming non metal element group; X = heterocyclic, substituted amino group, aryl; Y = H, substituent; R6 = substituent). At least one of the photosensitive layer contg. the cyan coupler comprises .gtoreq.80 % **silver halide** salt and the **silver halide** salt is a tabular **silver halide** particle having (100) main face.



The **photog.** photosensitive material provides the rapid processing speed, a sharp **image**, and the improved dependency on the **photog.** material treatment, and is used for scanning exposition by a semiconductor laser beam.

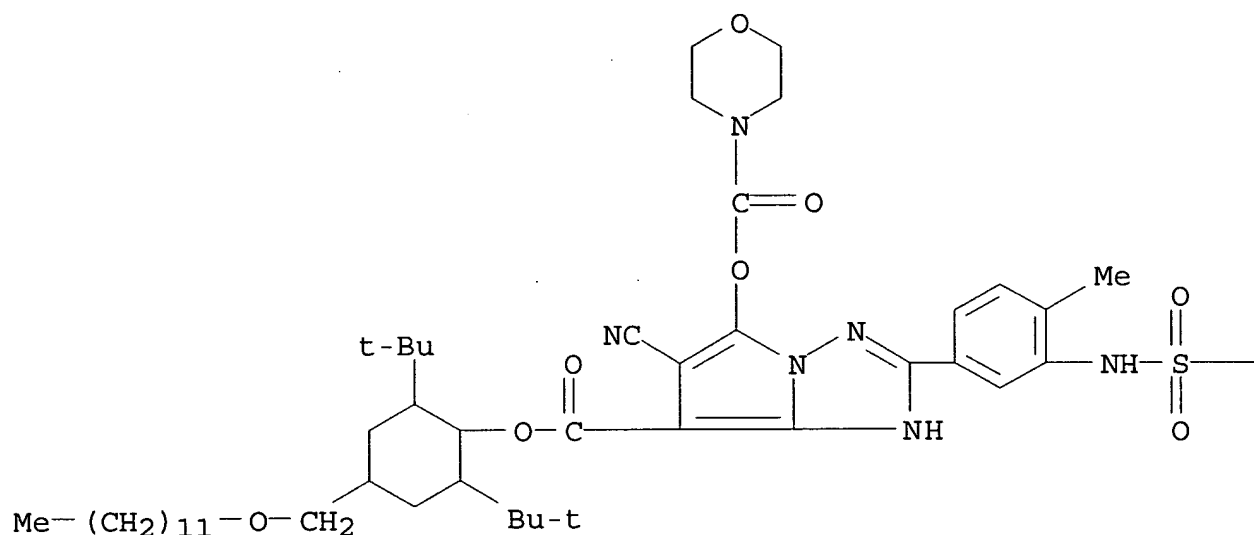
IT 200049-64-5 200049-65-6

(pigment forming coupler for **silver halide** color **photog.** photosensitive material)

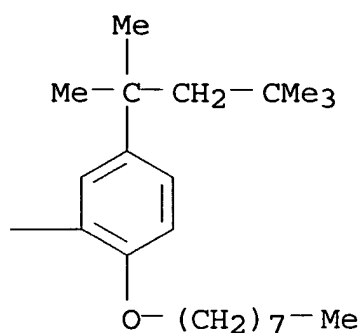
RN 200049-64-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

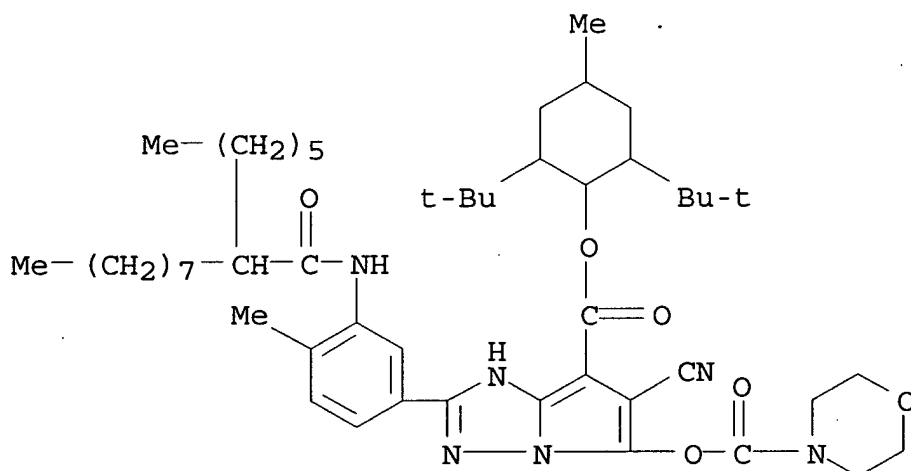
PAGE 1-A



PAGE 1-B



RN 200049-65-6 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38  
 ICS G03C001-035; G03C001-83; G03C005-08; G03C007-00  
 CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 ST **silver halide color photog**  
 photosensitive material; cyan coupler **silver**  
**halide** emulsion  
 IT Cyan couplers  
 Photographic emulsions  
 (silver halide color photog.)

photosensitive material and **image** forming method using same)

IT 188745-52-0 200049-64-5 200049-65-6  
(pigment forming coupler for **silver halide**  
color **photog.** photosensitive material)

L26 ANSWER 12 OF 19 HCA COPYRIGHT 2003 ACS

128:277020 **Silver halide color photographic**

material containing a pyrroloazole polymer cyan coupler. Mizukawa, Hiroki; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10078640 A2 19980324 Heisei, 62 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-250856 19960903.

AB Claimed color **photog.** material contain (1) a polymer comprising a coupler monomer CH<sub>2</sub>:CR<sub>1</sub>(L<sub>1</sub>)i(L<sub>2</sub>)jQ (R<sub>1</sub> = H, alkyl, aryl, Cl; L<sub>1</sub> = CONR<sub>2</sub>, CO, NR<sub>2</sub>C(:O), OC(:O), etc; R<sub>2</sub> = H, alkyl, aryl, heterocyclic group; L<sub>2</sub> = bivalent linkage; i, j = 0, 1; Q = pyrroloazole moiety), and (2) a polymer comprising a monomer having no coupling capability. The compd. is a cyan coupler with good developability, providing **images** with good spectral characteristics and good **image** stability. Thus, a polymer coupler prepd. from 2-acrylamino-phenyl-5-morpholinocarbonyloxy-6-cyano-7-(4-methyl-2,4-di-tert-butyl-1-cyclohexyl)pyrrolotriazole and Bu acrylate was successfully used for a multilayer color neg. film.

IT 205505-01-7 205505-02-8 205505-04-0  
205505-08-4 205505-17-5 205505-19-7  
205505-21-1 205505-28-8 205505-29-9  
(coupler; color **photog.** material contg. pyrroloazole  
polymer cyan coupler for developability and color reprodn.  
quality)

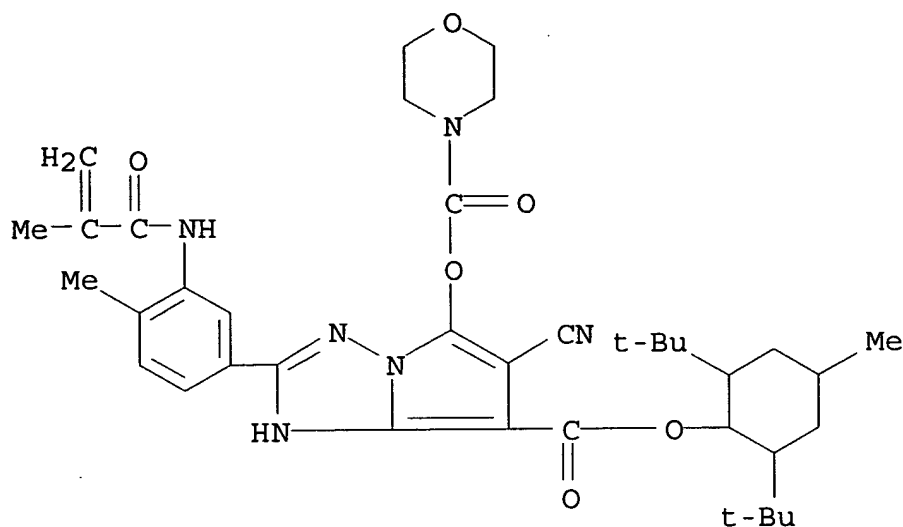
RN 205505-01-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester, polymer with ethyl 2-propenoate (9CI) (CA  
INDEX NAME)

CM 1

CRN 205505-00-6

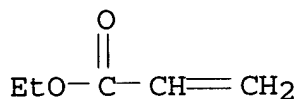
CMF C38 H50 N6 O6



CM 2

CRN 140-88-5

CMF C5 H8 O2



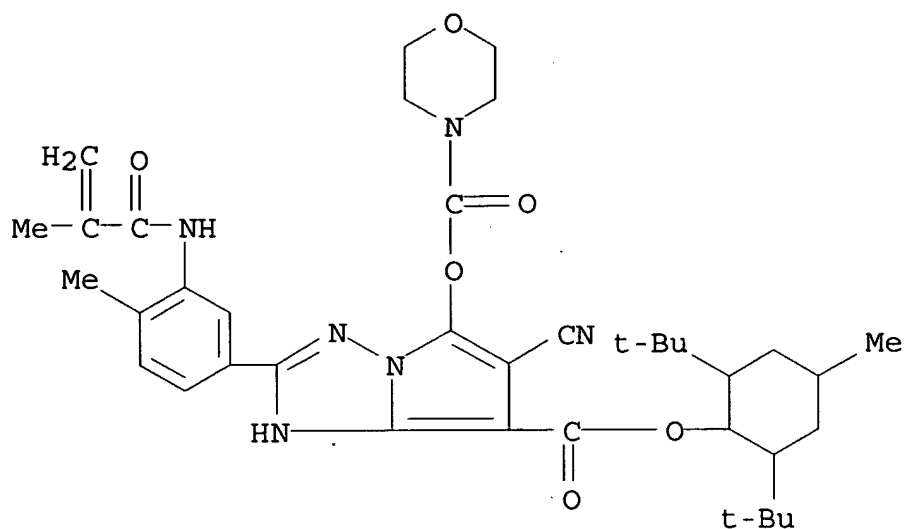
RN 205505-02-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
 [(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
 methylcyclohexyl ester, polymer with butyl 2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 205505-00-6

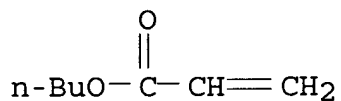
CMF C38 H50 N6 O6



CM 2

CRN 141-32-2

CMF C7 H12 O2



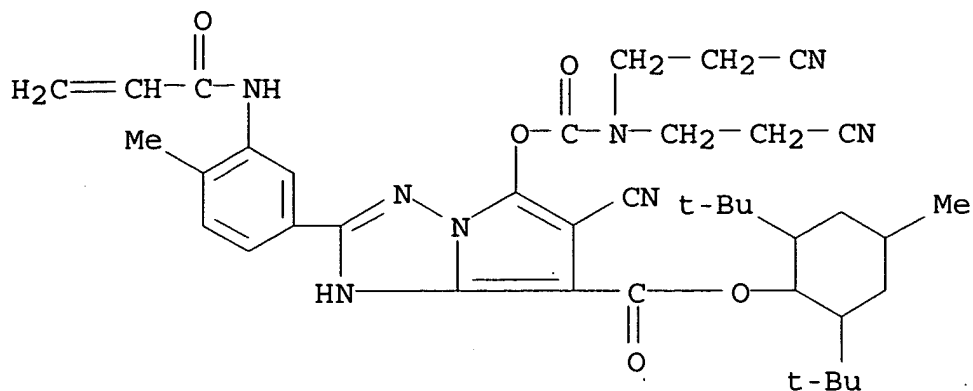
RN 205505-04-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 5-[[[bis(2-cyanoethyl)amino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[(1-oxo-2-propenyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

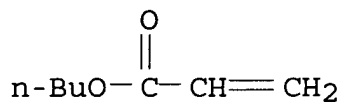
CRN 205505-03-9

CMF C39 H48 N8 O5



CM 2

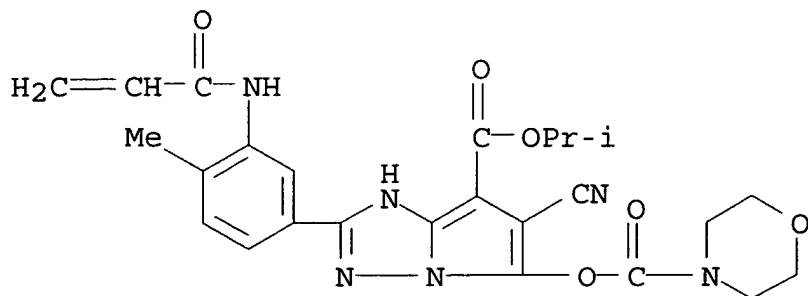
CRN 141-32-2  
CMF C7 H12 O2



RN 205505-08-4 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-3-[(1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 1-methylethyl ester, polymer with butyl  
2-propenoate (9CI) (CA INDEX NAME)

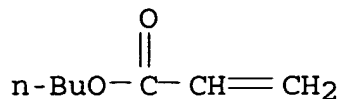
CM 1

CRN 205505-07-3  
CMF C25 H26 N6 O6



CM 2

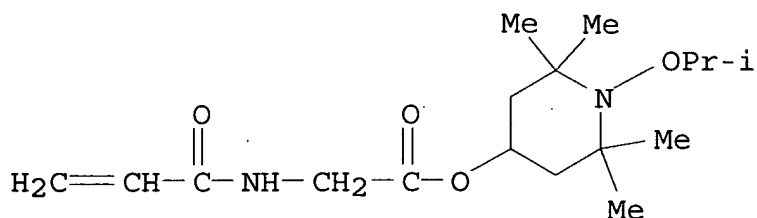
CRN 141-32-2  
CMF C7 H12 O2



RN 205505-17-5 HCA  
CN Glycine, N-(1-oxo-2-propenyl)-, 2,2,6,6-tetramethyl-1-(1-methylethoxy)-4-piperidinyl ester, polymer with 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-1H-pyrrolo[1,2-b][1,2,4]triazole-7-carboxylate and butyl 2-propenoate (9CI) (CA INDEX NAME)

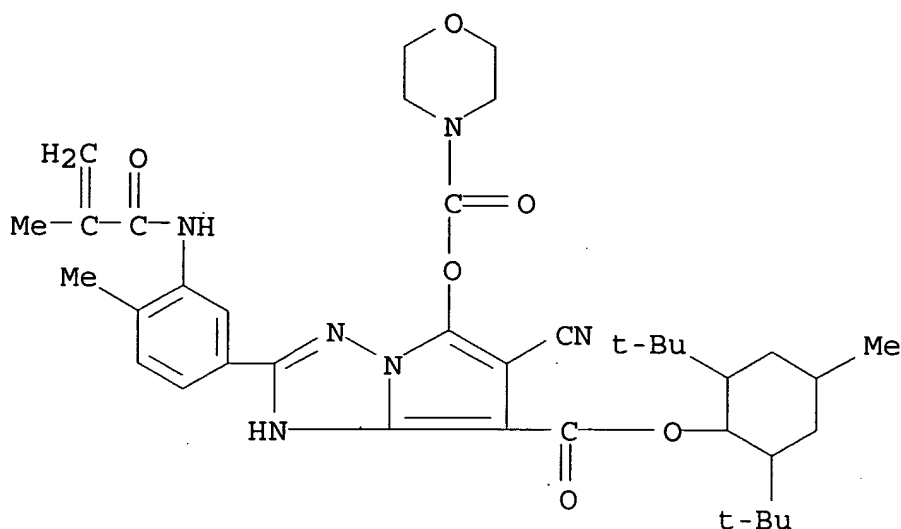
CM 1

CRN 205505-16-4  
CMF C17 H30 N2 O4



CM 2

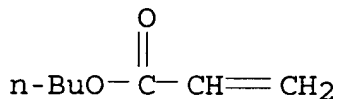
CRN 205505-00-6  
CMF C38 H50 N6 O6



CM 3

CRN 141-32-2

CMF C7 H12 O2



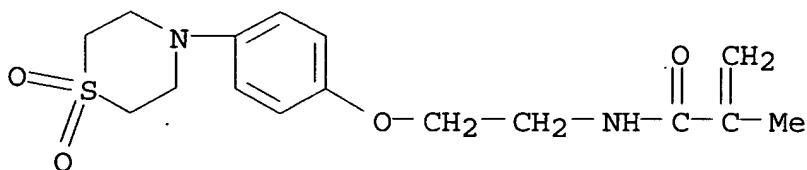
RN 205505-19-7 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
 [(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
 methylcyclohexyl ester, polymer with butyl 2-propenoate and  
 N-[2-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]ethyl]-2-methyl-2-  
 propenamide (9CI) (CA INDEX NAME).

CM 1

CRN 205505-18-6

CMF C16 H22 N2 O4 S

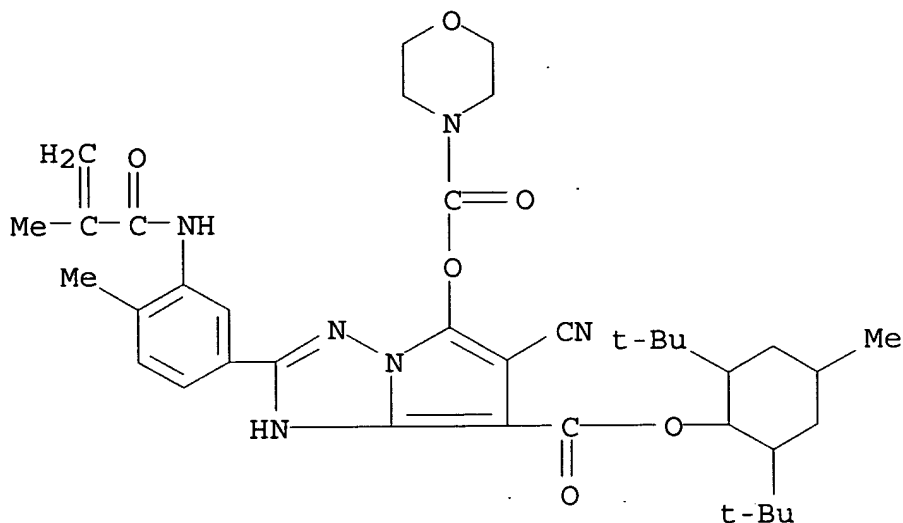




CM 2

CRN 205505-00-6

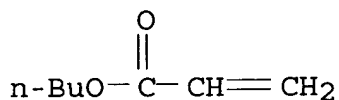
CMF C38 H50 N6 O6



CM 3

CRN 141-32-2

CMF C7 H12 O2



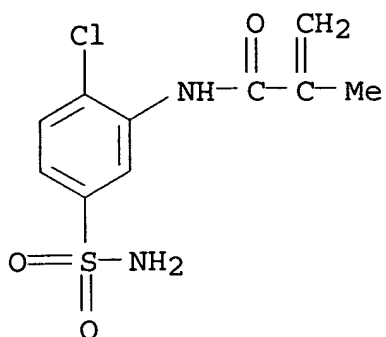
RN 205505-21-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
 [(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
 methylcyclohexyl ester, polymer with N-[5-(aminosulfonyl)-2-  
 chlorophenyl]-2-methyl-2-propenamido, butyl 2-propenoate and  
 N-[2-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]ethyl]-2-methyl-2-  
 propenamido (9CI) (CA INDEX NAME)

CM 1

CRN 205505-20-0

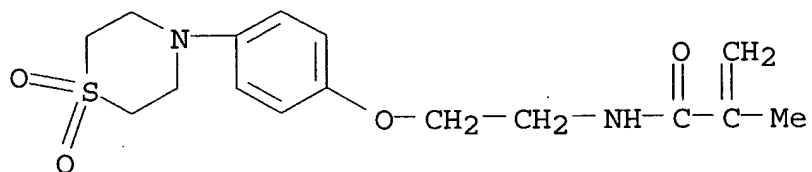
CMF C10 H11 Cl N2 O3 S



CM 2

CRN 205505-18-6

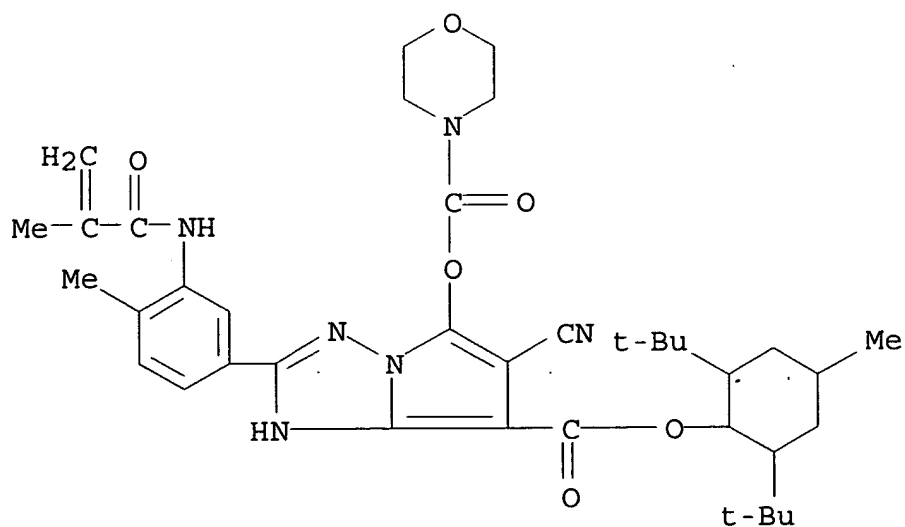
CMF C16 H22 N2 O4 S



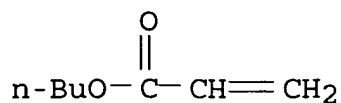
CM 3

CRN 205505-00-6

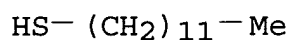
CMF C38 H50 N6 O6



CM 4

CRN 141-32-2  
CMF C7 H12 O2RN 205505-28-8 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester, telomer with butyl 2-propenoate and  
1-dodecanethiol (9CI) (CA INDEX NAME)

CM 1

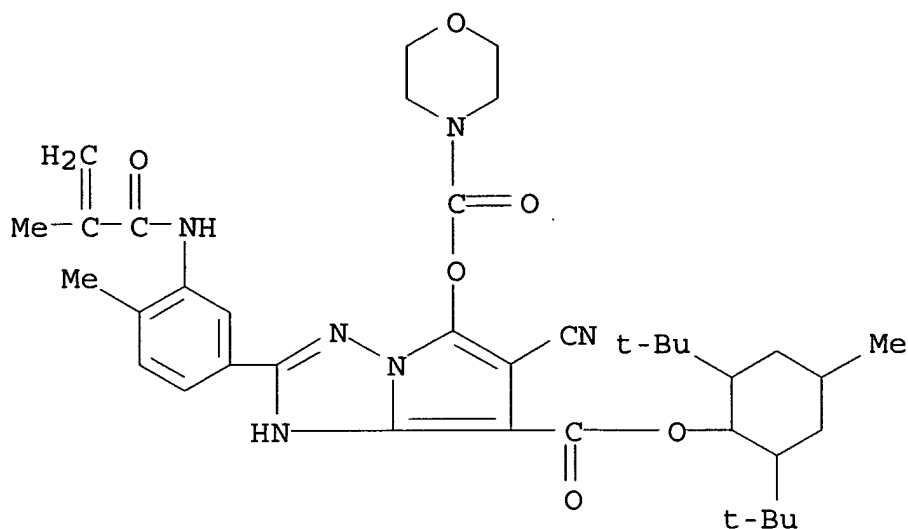
CRN 112-55-0  
CMF C12 H26 S

CM 2

CRN 205505-02-8  
CMF (C38 H50 N6 O6 . C7 H12 O2)x  
CCI PMS

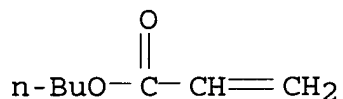
CM 3

CRN 205505-00-6  
CMF C38 H50 N6 O6



CM 4

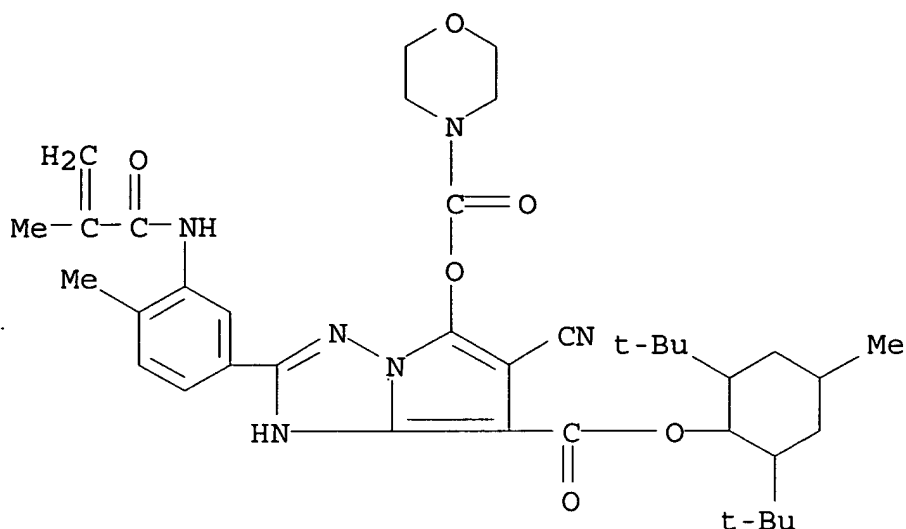
CRN 141-32-2  
CMF C7 H12 O2



RN 205505-29-9 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-  
[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester, polymer with 2-[(2-methyl-1-oxo-2-  
propenyl)oxy]ethyl 3-oxobutanoate (9CI) (CA INDEX NAME)

CM 1

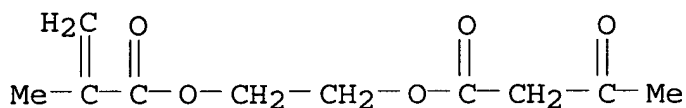
CRN 205505-00-6  
CMF C38 H50 N6 O6



CM 2

CRN 21282-97-3

CMF C10 H14 O5



IC ICM G03C007-327  
ICS G03C001-00; G03C007-00; G03C007-38

CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

ST polymer cyan coupler pyrroloazole **photog**; pyrroloazole  
cyan coupler **photog** material; acrylamide polymer cyan  
coupler **photog**; methacrylamide polymer cyan coupler  
**photog**

IT Cyan couplers  
(color **photog**. material contg. pyrroloazole polymer  
cyan coupler for developability and color reprodn. quality)

IT **Photographic** films  
(color; color **photog**. material contg. pyrroloazole  
polymer cyan coupler for developability and color reprodn.  
quality)

IT 205504-94-5 205504-95-6 205504-96-7 205504-98-9 205504-99-0  
205505-01-7 205505-02-8 205505-04-0  
205505-06-2 205505-08-4 205505-10-8 205505-12-0  
205505-13-1 205505-15-3 205505-17-5 205505-19-7  
205505-21-1 205505-23-3 205505-25-5 205505-27-7

205505-28-8 205505-29-9

(coupler; color **photog.** material contg. pyrroloazole  
polymer cyan coupler for developability and color reprodn.  
quality)

L26 ANSWER 13 OF 19 HCA COPYRIGHT 2003 ACS

128:68441 **Silver halide color photographic**

material using novel coupler. Shimada, Yasuhiro (Fuji Photo Film  
Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09292679 A2

19971111 Heisei, 38 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1996-131245 19960426.

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title material contains, in .gtoreq.1 layer on the support,  
.gtoreq.1 coupler I (R1, R2 = aliph. group; R3, R4, Y = H or  
substituent; X = heterocycle, substituted amino, aryl). A color  
**photog.** film using II gave high color quality **images**  
with good lightfastness.

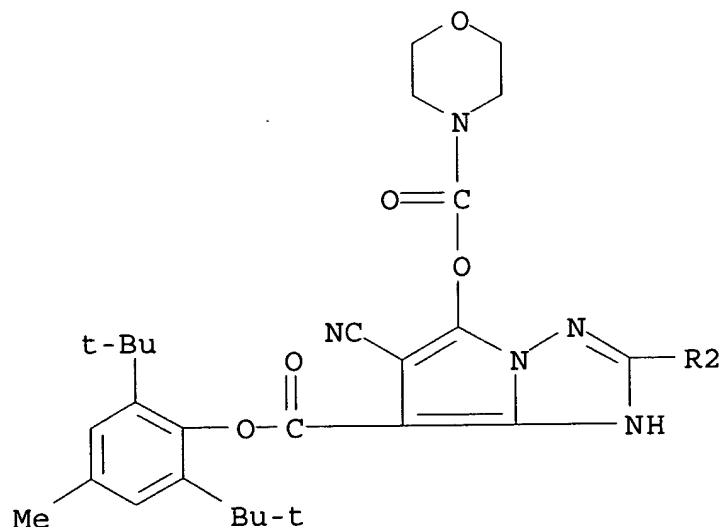
IT 200111-38-2 200111-46-2

(triazole deriv. **photog.** cyan coupler)

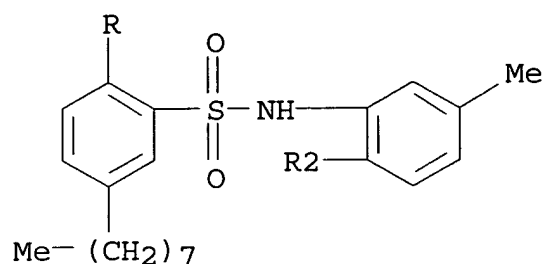
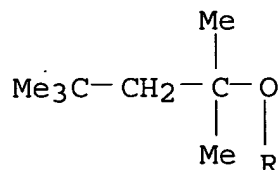
RN 200111-38-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-2-[[[5-octyl-2-(1,1,3,3-  
tetramethylbutoxy)phenyl]sulfonyl]amino]phenyl]-5-[(4-  
morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl  
ester (9CI) (CA INDEX NAME)

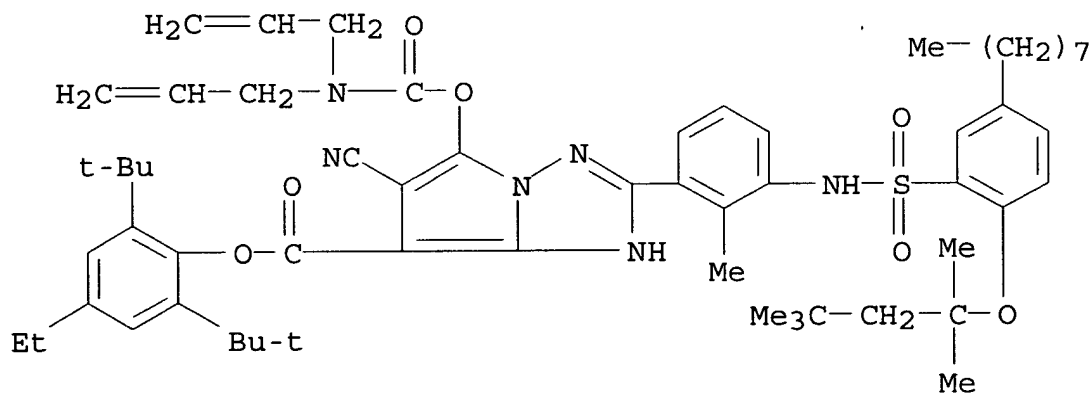
PAGE 1-A



PAGE 2-A



RN 200111-46-2 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-5-[[[(di-2-propenylamino)carbonyl]oxy]-2-[2-methyl-3-[[[5-octyl-2-(1,1,3,3-tetramethylbutoxy)phenyl]sulfonyl]amino]phenyl]-,  
 2,6-bis(1,1-dimethylethyl)-4-ethylphenyl ester (9CI) (CA INDEX  
 NAME)



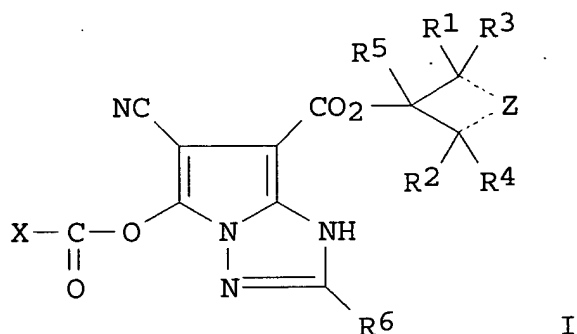
IC ICM G03C007-38  
 ICS C07D487-04; G03C007-00  
 CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 ST triazole deriv **photog** cyan coupler  
 IT Cyan couplers  
 (triazole deriv. **photog.** cyan coupler)

- IT 200111-47-3P  
(bromination of; prepn. of triazole deriv. **photog.** cyan coupler)
- IT 200111-48-4P 200111-49-5P  
(prepn. of triazole deriv. **photog.** cyan coupler)
- IT 105-34-0, Methyl cyanoacetate 128-37-0, 2,6-Di-tert-butyl-4-methylphenol, reactions 15159-40-7, Morpholinocarbonyl chloride 25761-72-2, Diallylcarbamoyl chloride 155049-60-8, 1H-1,2,4-Triazole-3-acetic acid  
(prepn. of triazole deriv. **photog.** cyan coupler)
- IT 191274-16-5 200111-38-2 200111-39-3 200111-40-6  
200111-41-7 200111-42-8 200111-43-9 200111-44-0  
200111-46-2  
(triazole deriv. **photog.** cyan coupler)
- IT 200111-37-1P 200111-45-1P  
(triazole deriv. **photog.** cyan coupler)

L26 ANSWER 14 OF 19 HCA COPYRIGHT 2003 ACS

128:68435 **Silver halide color photographic**  
material containing pyrrolotriazole cyan coupler and  
arylsulfonamide. Mikoshiba, Hisashi; Yoneyama, Hiroyuki; Morigaki,  
Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
JP 09288338 A2 19971104 Heisei, 70 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1996-126414 19960423.

GI

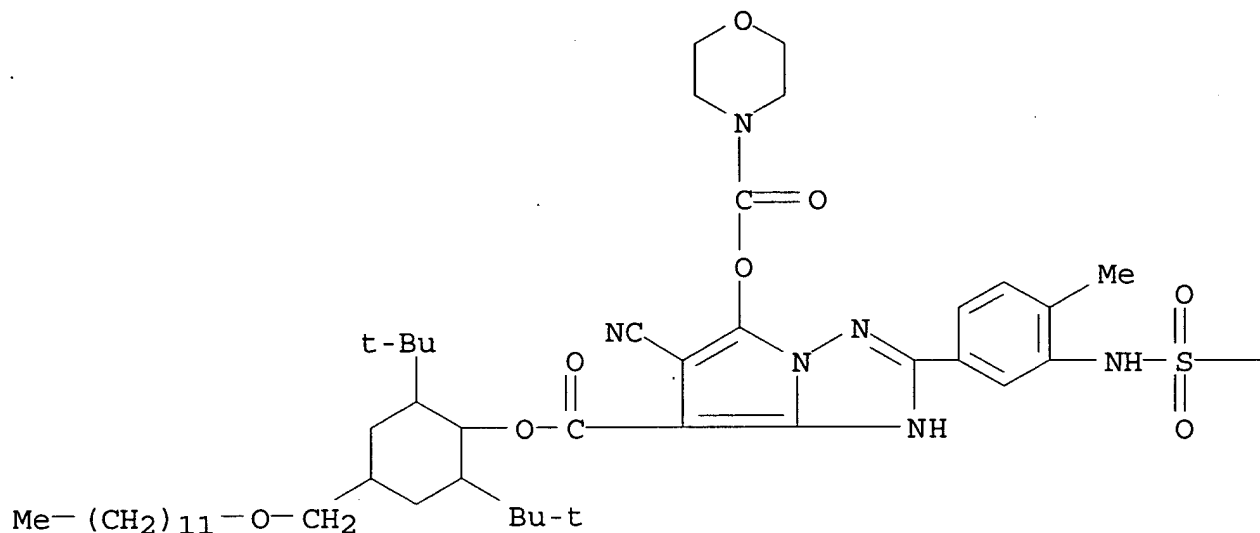


- AB The material contains a pyrrolotriazole cyan coupler I [R1-5 = H, substituent; Z = (substituted) nonmetal at. group required to form ring; X = H, substituent; R6 = H, substituent] and an (un)substituted arylsulfonamide. The material shows improved color reprodn. quality and gives light-resistant **images**.
- IT 200049-64-5 200049-65-6  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)
- RN 200049-64-5 HCA

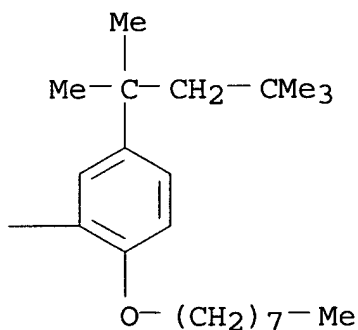


CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-  
tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-  
morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

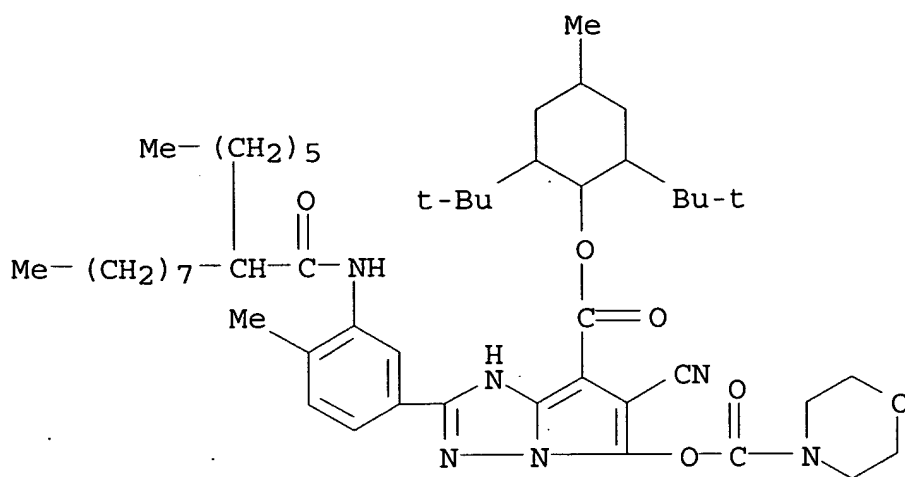


PAGE 1-B



RN 200049-65-6 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-  
morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-

methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38  
ICS G03C007-00; G03C007-392

CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 28

ST pyrrolotriazole cyan coupler **photog** material;  
arylsulfonamide **photog** material cyan coupler

IT Cyan couplers  
Photographic films  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

IT 178743-91-4 184947-09-9 **200049-64-5 200049-65-6**  
200110-90-3 200110-96-9 200137-20-8 200137-21-9 200137-23-1  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

IT 109357-84-8 117490-80-9 136664-63-6 163300-34-3 184773-63-5  
184773-64-6 200137-30-0 200137-31-1 200137-32-2 200137-33-3  
200137-34-4 200137-35-5 200137-36-6 200137-37-7 200137-38-8  
200137-39-9 200137-40-2 200137-41-3 200137-43-5 200137-44-6  
200137-45-7 200137-51-5 200198-79-4  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

IT 188745-52-0P  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

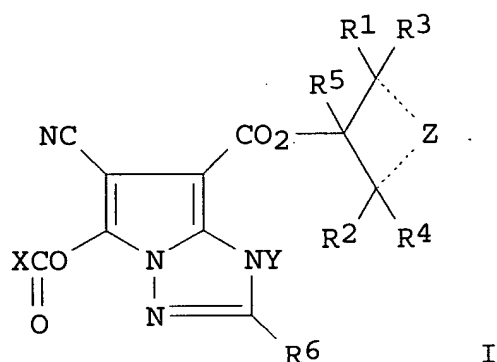
IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol  
194419-32-4  
(**silver halide color photog.**  
material contg. pyrrolotriazole cyan coupler and arylsulfonamide)

L26 ANSWER 15 OF 19 HCA COPYRIGHT 2003 ACS

128:68434 **Silver halide color photographic**

material with improved color reproduction quality and storage stability. Takada, Kiyoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288336 A2 19971104 Heisei, 41 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-101555 19960423.

GI



AB The material has .gtoreq.1 photosensitive **Ag halide** emulsion layer contg. .gtoreq.1 coupler I [R1-5 = H, substituent; Z = (substituted) nonmetal at. group required to form ring; X = heterocycle; (substituted) amino, aryl; Y = H, substituent; R6 = substituent] and **AgI**-free Ag(Br,Cl) or **AgCl** particles (**AgCl** content .gtoreq.98 mol%) sensitized with a Au compd. The material shows improved color reprodn. quality and storage stability.

IT 7783-90-6, **Silver chloride**, uses (content-controlled; **silver halide color photog.** material contg. cyan coupler for improved color reprodn. quality)

RN 7783-90-6 HCA

CN Silver chloride (AgCl) (9CI) (CA INDEX NAME)

Ag-Cl

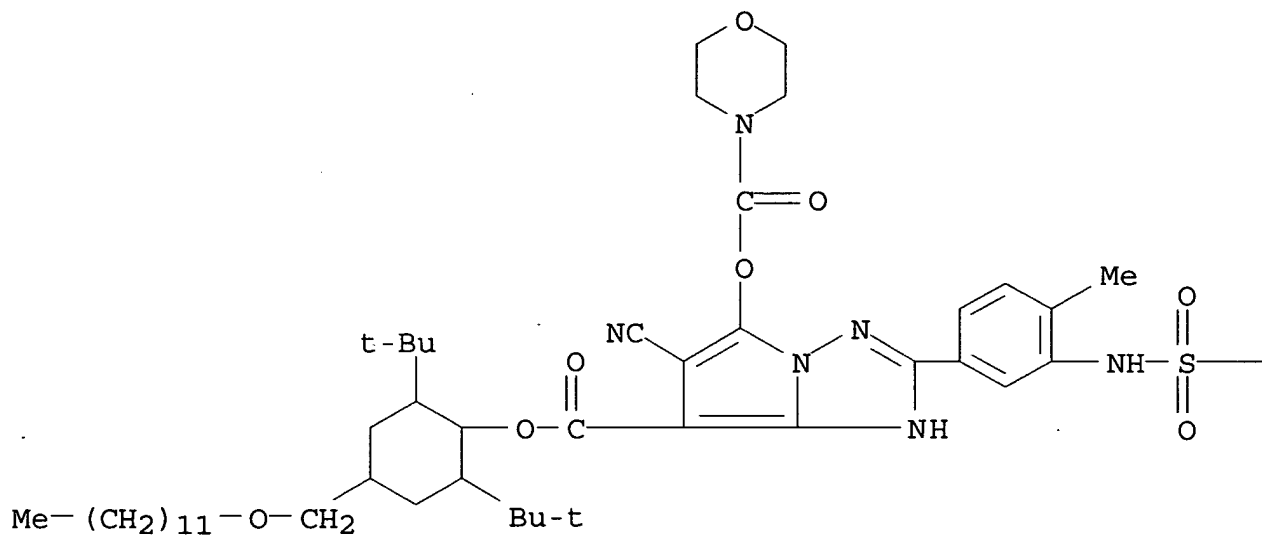
IT 200049-64-5 200049-65-6 (**silver halide color photog.** material contg. cyan coupler for improved color reprodn. quality)

RN 200049-64-5 HCA

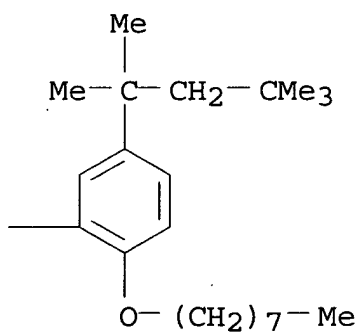
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]aminophenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-

[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

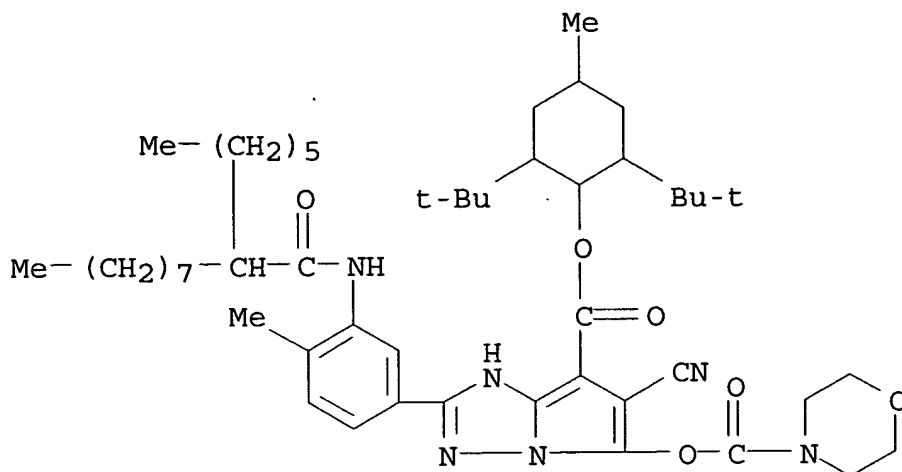
PAGE 1-A



PAGE 1-B



RN 200049-65-6 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C001-035; G03C001-09; G03C007-00
- CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **photog** material cyan coupler; gold sensitizer  
**photog** material **silver halide**
- IT **Photographic** sensitizers  
(gold compd.; **silver halide** color  
**photog.** material contg. cyan coupler for improved color  
reprodn. quality)
- IT Cyan couplers  
**Photographic** films  
(**silver halide** color **photog.**  
material contg. cyan coupler for improved color reprodn. quality)
- IT **7783-90-6, Silver chloride**, uses  
(content-controlled; **silver halide** color  
**photog.** material contg. cyan coupler for improved color  
reprodn. quality)
- IT 16903-35-8, Chloroauric acid  
(sensitizer; **silver halide** color  
**photog.** material contg. cyan coupler for improved color  
reprodn. quality)
- IT 178743-91-4 184947-09-9 200049-62-3 200049-63-4  
**200049-64-5 200049-65-6**  
(**silver halide** color **photog.**  
material contg. cyan coupler for improved color reprodn. quality)
- IT 188745-52-0P  
(**silver halide** color **photog.**  
material contg. cyan coupler for improved color reprodn. quality)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(**silver halide** color **photog.**  
material contg. cyan coupler for improved color reprodn. quality)
- IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol

194419-32-4

(silver halide color photog.

material contg. cyan coupler for improved color reprodn. quality)

L26 ANSWER 16 OF 19 HCA COPYRIGHT 2003 ACS

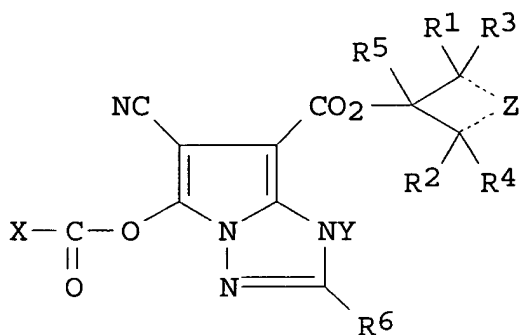
128:68432 Silver halide color photographic

material containing phenolic and pyrrolotriazole cyan couplers.

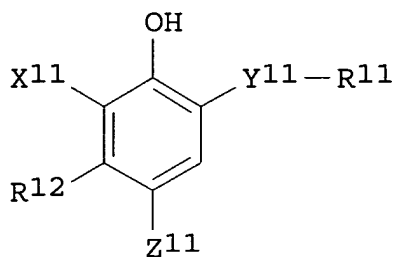
Yoneyama, Hiroyuki; Mikoshiba, Hisashi; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288337 A2 19971104 Heisei, 75 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1996-101556 19960423.

GI



I



II

AB Claimed color photog. material has .gtoreq.1 cyan dye-developing Ag halide emulsion layer contg.

(1) a cyan coupler I (R1-5 = H, substituent; Z = non-metal ring; X = heterocyclic group, amino aryl; R6 = substituent; Y = H, substituent) and (2) a phenolic coupler II (R11 = aliph., arom. or heterocyclic group, amino; X11 = H, halo, alkoxy, acylamino; R12 = alkyl, acylamino; R12 = and X11 may be combined to form a 5-, 6- or 7-membered ring; Z = H, leaving group to be released by the coupling reaction with the oxidized developing agent), where the added ratio of coupler II/coupler I is 60 mol% or less. It has good color reprodn. quality, good dye stability and is insensitive to the processing fluctuation. Thus, in a multilayer color paper, coupler I (R1-5 and Z = 2,6-di-tert.-butyl-4-methylcyclohexyl; R6 = 4-tert.-butylphenyl; Y = H; X = morpholine-4-yl) and coupler II (n-pentadecylcarbonylamino-4,6-di-chloro-5-ethylphenol) were utilized to provide the mentioned advantages.

IT 200049-64-5 200049-65-6

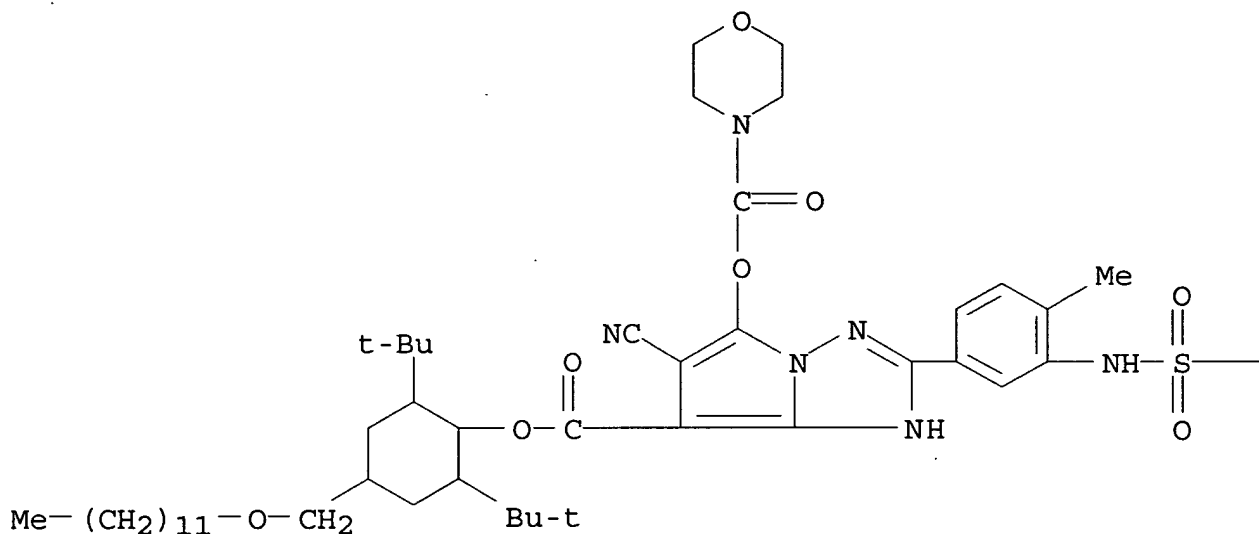
(color photog. material contg. phenolic and pyrrolotriazole cyan couplers to improve color reprodn. quality and dye stability)

RN 200049-64-5 HCA

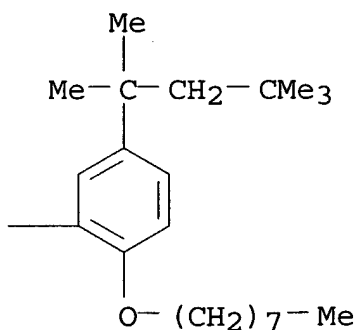
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-

morpholinylcarbonyloxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
[(dodecyloxy)methyl]cyclohexyl ester (9CI) (CA INDEX NAME)

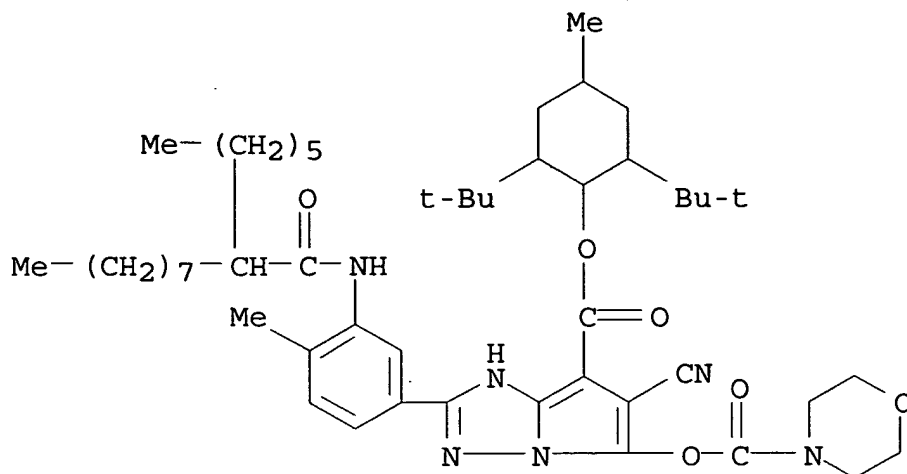
PAGE 1-A



PAGE 1-B



RN 200049-65-6 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[3-[(2-hexyl-1-oxodecyl)amino]-4-methylphenyl]-5-[(4-  
morpholinylcarbonyloxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C001-00; G03C007-00; G03C007-34; G03C007-392
- CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST pyrroloazole cyan coupler **photog** material; phenol cyan  
coupler **photog** material; acylaminophenol cyan coupler  
**photog** material; carbamoylphenol cyan coupler **photog**  
material
- IT Cyan couplers  
(color **photog.** material contg. phenolic and  
pyrrolotriazole cyan couplers to improve color reprodn. quality  
and dye stability)
- IT 20364-09-4 31037-84-0 88725-29-5 92589-17-8 93951-12-3  
96758-05-3 99141-89-6 110968-12-2 117827-06-2 178743-91-4  
179330-32-6 **200049-64-5 200049-65-6**  
200110-89-0 200110-90-3 200110-91-4 200110-96-9  
(color **photog.** material contg. phenolic and  
pyrrolotriazole cyan couplers to improve color reprodn. quality  
and dye stability)
- IT 188745-52-0P  
(color **photog.** material contg. phenolic and  
pyrrolotriazole cyan couplers to improve color reprodn. quality  
and dye stability)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(for color **photog.** material)
- IT 105-34-0, Methyl cyanoacetate 407-25-0, Hexafluoroacetic anhydride  
15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2  
194419-32-4  
(pyrrolotriazole cyan coupler from; for color **photog.**  
material)

L26 ANSWER 17 OF 19 HCA COPYRIGHT 2003 ACS

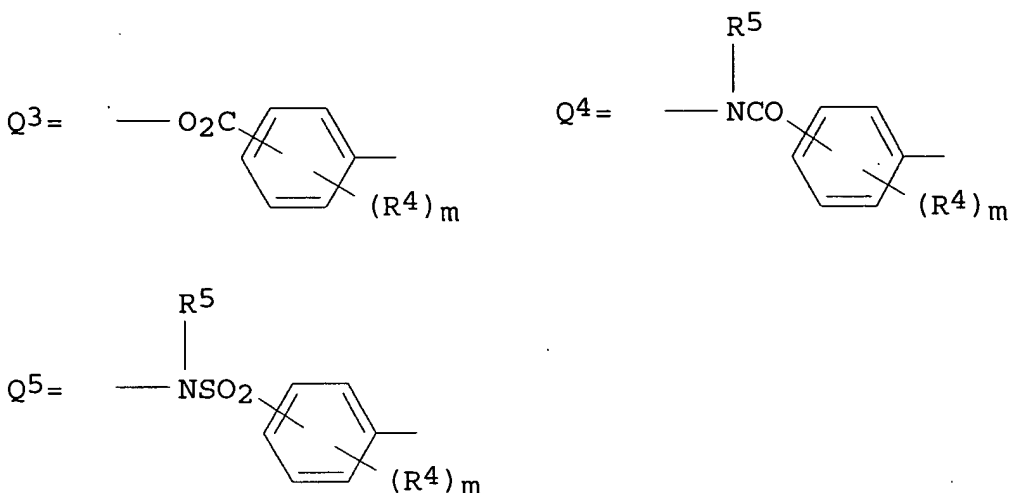
127:197698 **Silver halide** color light-sensitive

material containing a polymer coupler and method of making a color



filter using it. Igarashi, Tatsuya; Mizukawa, Hiroki; Hirai, Hiroyuki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09204027 A2 19970805 Heisei, 48 pp. (Japanese).  
 CODEN: JKXXAF. APPLICATION: JP 1996-316864 19961114. PRIORITY: JP 1995-326252 19951122.

GI



AB The title light-sensitive material contains at least one polymer coupler selected from (1) a copolymer of at least one magenta coupler monomer of formula  $Q1-(L2)_j-(L1)_i-C(R1):CH_2$  (I;  $R1 = H, Cl, alkyl, aryl$ ;  $L1 = CONR_2, CO_2, NR_2CO, O_2C, Q_3, Q_4, Q_5$ ; wherein  $R_4 =$  substituent;  $R_5 =$  same as  $R_2$ ;  $m = 0-4$ ;  $R_2 = H, alkyl, aryl, heterocyclyl$ ;  $L_2 =$  bivalent linkage group linking  $L1$  and  $Q1$ ;  $i, j = 0, 1$ ;  $Q1 =$  magenta coupler residue forming a magenta dye upon coupling with the oxidized form of an arom. primary amine developer) and at least one cyan coupler of formula  $Q2-(L4)_h-(L3)_g-C(R3):CH_2$  (II;  $R_3, L_3, L_4,$  and  $g$  are same as described in  $R_1, L_1, L_2,$  and  $i,$  resp.;  $Q2 =$  cyan coupler residue forming a cyan dye upon coupling with the oxidized form of an arom. primary amine developer) or (2) a copolymer of a magenta coupler I, a cyan coupler II, and a noncoloring monomer contg. at least one ethylene group which does not have capability of coupling with the oxidized form of an arom. primary amine developer. In a **silver halide** color light-sensitive material possessing at least three **silver halide** emulsion layers each having different color sensitivity on a support, each **silver halide** emulsion layer contains a combination of couplers coloring blue, green, or red upon reaction with the oxidized form of an arom. primary amine developer. Besides these three silver emulsion layers, it also possesses at least another **silver**

**halide** emulsion layer of sep. color sensitivity contg. a coupler color-compensating substantially black of transmittance d. .gtoreq.2.5 when all the couplers on the support are reacted. A color filter possessing blue, green, and red pixels is manufd. by pattern exposure of above **silver halide** light-sensitive material followed by color development and desilverization. This light-sensitive material and can form blue **images** excellent in spectral transmission property and thermal and light stability and is suitable for making a color filter thin in thickness, excellent in planarity and light and thermal stability, and also possessing black part of high d.

IT 194280-71-2P

(**silver halide** color light-sensitive material contg. polymer coupler and method of making color filter using it)

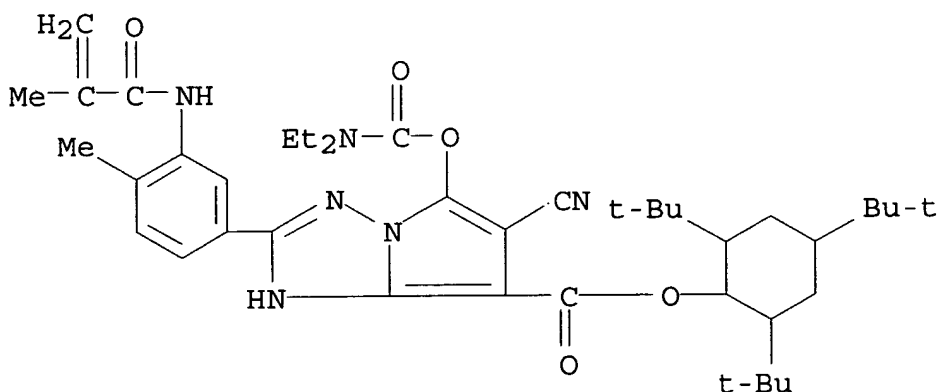
RN 194280-71-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[[(diethylamino)carbonyl]oxy]-2-[4-methyl-3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-, 2,4,6-tris(1,1-dimethylethyl)cyclohexyl ester, polymer with butyl 2-propenoate and N-[4-[7-chloro-6-(1,1-dimethylethyl)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 194280-70-1

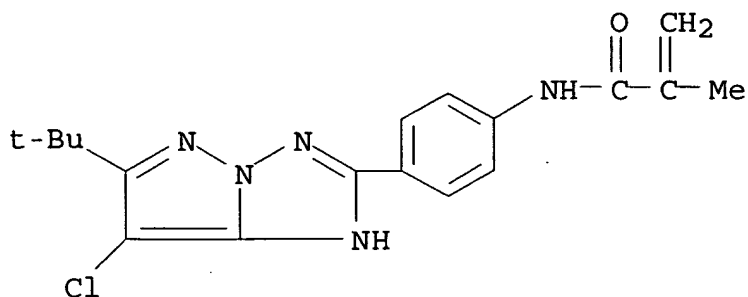
CMF C41 H58 N6 O5



CM 2

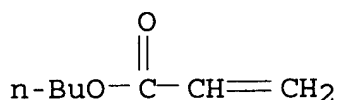
CRN 189814-79-7

CMF C18 H20 Cl N5 O



CM 3

CRN 141-32-2  
CMF C7 H12 O2

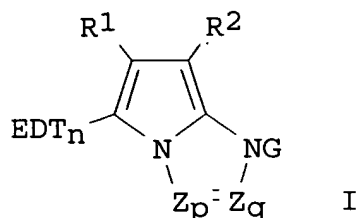


IC ICM G03C007-327  
ICS G02B005-20; G02B005-22; G03C007-18; G03C007-20  
CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **silver halide** color light sensitive material;  
color filter polymer coupler  
IT Polymers, preparation  
(**photog.** couplers; **silver halide**  
color light-sensitive material contg. a polymer coupler and  
method of making a color filter using it)  
IT **Photographic** couplers  
(polymer; **silver halide** color light-sensitive  
material contg. a polymer coupler and method of making a color  
filter using it)  
IT Optical filters  
(**silver halide** color light-sensitive material  
contg. polymer coupler and method of making color filter using  
it)  
IT 194280-35-8P 194280-36-9P 194280-38-1P 194280-40-5P  
194280-41-6P 194280-44-9P 194280-47-2P 194280-49-4P  
194280-51-8P 194280-52-9P 194280-54-1P 194280-55-2P  
194280-57-4P 194280-59-6P 194280-61-0P 194280-63-2P  
194280-65-4P 194280-66-5P 194280-67-6P 194280-69-8P  
**194280-71-2P** 194280-73-4P 194280-74-5P  
(**silver halide** color light-sensitive material  
contg. polymer coupler and method of making color filter using  
it)

## 127:25872 Silver halide color photographic

material containing pyrrolotriazole derivative cyan coupler. Ito, Takayuki; Matsuda, Naoto (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09080712 A2 19970328 Heisei, 58 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-258335 19950912.

GI



AB The photog. material comprises a support coated with .gtoreq.1 layer contg. a pyrrolotriazole deriv. cyan coupler I (Zp, Zq = CR3:, N:; Zp .noteq. Zq; R1, R2 = electron-withdrawing group with Hammett's .sigma.p value 0.2-1.0; R3 = substituent; T = releasable connecting group by coupling with oxidant of color developer followed by releasing ED; n = 0, 1; ED = redox-reactive group with oxidant of color developer by releasing from T; G = H, releasable blocking group at development). The material shows good graininess.

IT 189883-45-2 189883-48-5

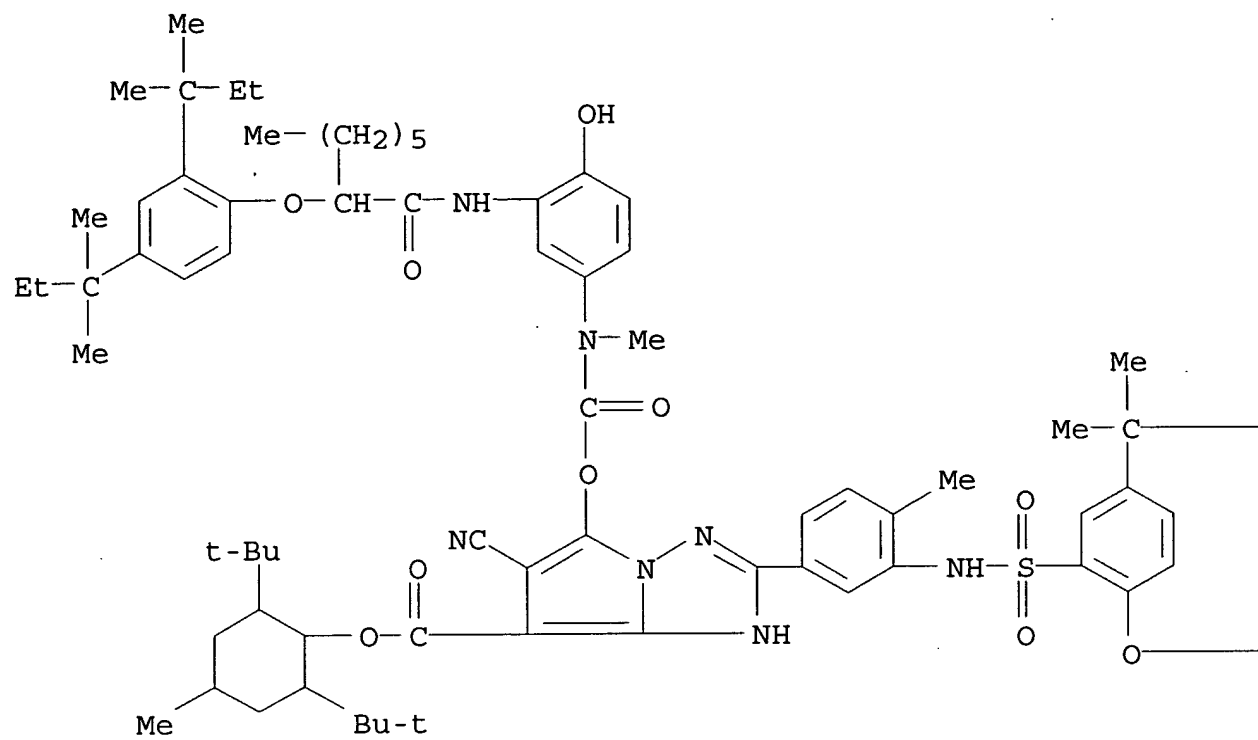
(silver halide color photog.

material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

RN 189883-45-2 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
5-[[[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxooctyl]amino]-4-hydroxyphenyl]methylamino]carbonyl]oxy]-6-cyano-2-[4-methyl-3-[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

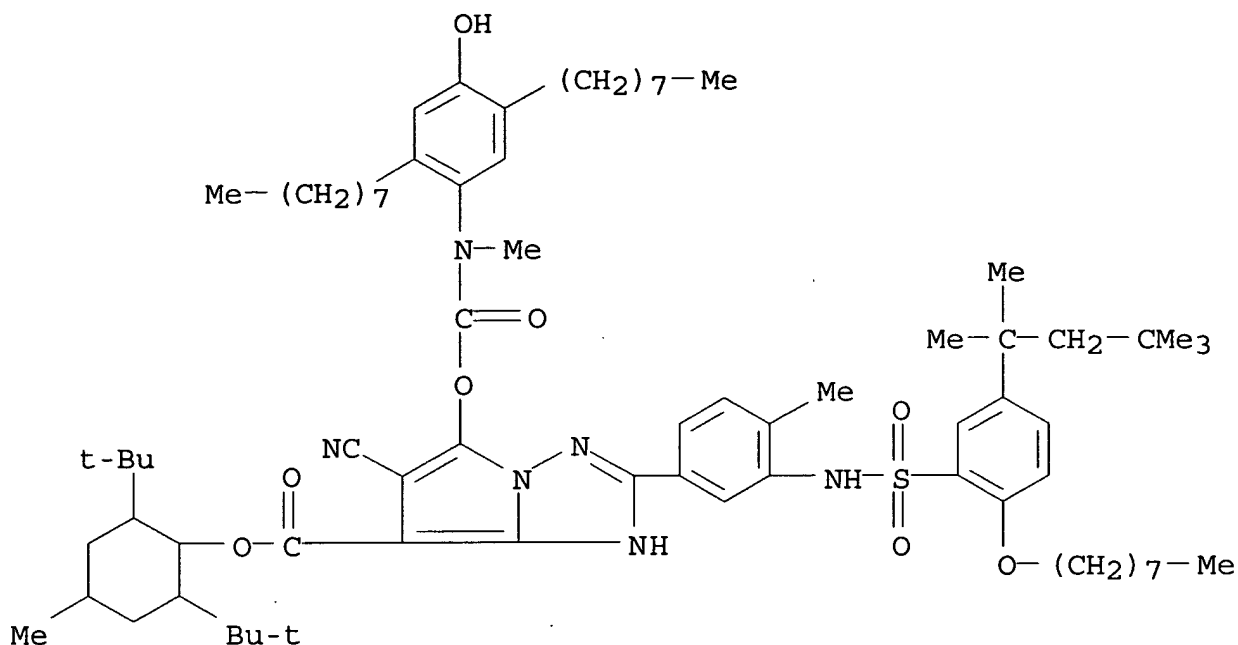


PAGE 1-B

— CH<sub>2</sub>— CMe<sub>3</sub>

— (CH<sub>2</sub>)<sub>7</sub>— Me

RN 189883-48-5 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-5-[[[(4-hydroxy-2,5-dioctylphenyl)methylamino]carbonyl]oxy]-  
2-[4-methyl-3-[[[2-(octyloxy)-5-(1,1,3,3-  
tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,  
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX  
NAME)



- IC ICM G03C007-38  
ICS G03C007-00
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST pyrrolo triazole cyan coupler color **photog**; graininess  
color **photog** film pyrrolotriazole coupler
- IT **Photographic** films  
(color; **silver halide** color **photog**.  
material contg. pyrrolotriazole deriv. cyan coupler showing good  
graininess)
- IT Cyan couplers  
(**silver halide** color **photog**.  
material contg. pyrrolotriazole deriv. cyan coupler showing good  
graininess)
- IT 189883-40-7 189883-41-8 189883-42-9 189883-43-0 189883-44-1  
189883-45-2 189883-46-3 189883-47-4 189883-48-5  
(**silver halide** color **photog**.  
material contg. pyrrolotriazole deriv. cyan coupler showing good  
graininess)
- IT 189883-53-2P  
(**silver halide** color **photog**.  
material contg. pyrrolotriazole deriv. cyan coupler showing good  
graininess)
- IT 189883-50-9P 189883-52-1P  
(**silver halide** color **photog**.  
material contg. pyrrolotriazole deriv. cyan coupler showing good  
graininess)
- IT 503-38-8, Trichloromethyl chloroformate 189883-49-6 189883-51-0  
(**silver halide** color **photog**.)

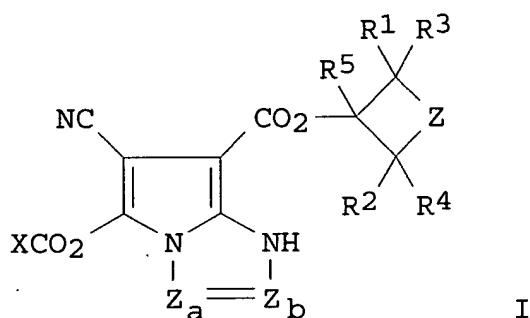
material contg. pyrrolotriazole deriv. cyan coupler showing good graininess)

L26 ANSWER 19 OF 19 HCA COPYRIGHT 2003 ACS

125:342738 Silver halide color photographic

material containing pyrroloazole cyan couplers and image formation method. Ozawa, Takashi; Shimada, Yasuhiro; Ito, Takayuki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08227127 A2 19960903 Heisei, 50 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-56820 19950222.

GI



AB The material comprises a support having thereon .gtoreq.1 the title coupler I [Zb = CR6: when Za =N: or Zb = N: when Za = CR6:; R1-5 = H, substituent; R6 = substituent; Z = (un)substituted nonmetallic at. group to form a ring; X = (un)substituted amino, aryl, heterocyclyl] and .gtoreq.1 non-color-forming diffusion-resistant X1NR5(G)mR2 [II; X1 = NR1R3, OR4; R1 = H, aliph. group, aryl, heterocyclyl; R3-4 = H, aliph. group, aryl, heterocyclyl, cyano, NO2, hydrazino; NR1R3 may be a heterocyclic ring; R5 = H, alkyl, group eliminated under an alk. condition; G = CO, SO2, SO, CONR6, CO2, SO 2NR7, POR8, C(:S), iminomethylene; R6-7 = H, alkyl, aryl; R8 = alkyl, aryl; m = 0-2; II may form oligomers or polymers by linking at the site of R1, R2, or R5]. A method for the **image** formation by imagewise exposure of the material, followed by black-and-white processing and treatment with a developer with pH .gtoreq.1 is also claimed. The material provides lightfast **images** with good color reproducibility.

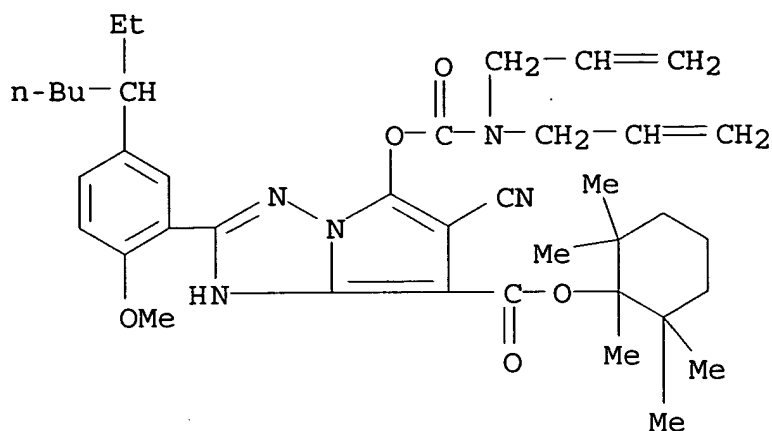
IT 183744-83-4

(photog. material contg. pyrroloazole cyan couplers and diffusion-resistant compds.)

RN 183744-83-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[[[di-2-propenylamino)carbonyl]oxy]-2-[5-(1-ethylpentyl)-2-methoxyphenyl]-, 1,2,2,6,6-pentamethylcyclohexyl ester (9CI) (CA INDEX NAME)





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IC      ICM      G03C007-38
ICS      G03C005-50; G03C007-00; G03C007-392; G03C007-407
CC      74-2 (Radiation Chemistry, Photochemistry, and
ST      Photographic and Other Reprographic Processes)
        color photog pyrroloazole cyano coupler; diffusion
        resistant compd photog material; film photog
        pyrroloazole cyan coupler
IT      Photographic films
        (color, photog. material contg. pyrroloazole cyan
        couplers and diffusion-resistant compds.)
IT      Photographic couplers
        (cyan, photog. material contg. pyrroloazole cyan
        couplers and diffusion-resistant compds.)
IT      183744-82-3 183744-83-4 183744-84-5 183744-85-6
        183744-86-7 183744-87-8 183744-88-9 183744-89-0 183744-90-3
        183744-91-4 183744-92-5
        (photog. material contg. pyrroloazole cyan couplers and
        diffusion-resistant compds.)
IT      125818-41-9 139611-57-7 153304-02-0 153304-09-7 153526-32-0
        183744-94-7 183744-95-8 183744-97-0 183744-98-1
        (photog. material contg. pyrroloazole cyan couplers and
        diffusion-resistant compds.)
IT      178743-95-8P
        (photog. material contg. pyrroloazole cyan couplers and
        diffusion-resistant compds.)
IT      178743-91-4P
        (prepn. of pyrroloazole cyan coupler for photog.
        material contg. diffusion-resistant compds.)
IT      178744-15-5P 178744-16-6P 178744-17-7P 178744-18-8P
        178744-19-9P
        (prepn. of pyrroloazole cyan coupler for photog.
        material contg. diffusion-resistant compds.)
IT      105-34-0, Methyl cyanoacetate 111-94-4 15159-40-7,
        Morpholinocarbonyl chloride 68006-66-6 163119-16-2,
        2,6-Di-tert-butyl-4-methylcyclohexanol 178744-14-4

```

(prepn. of pyrroloazole cyan coupler for **photog.**  
material contg. diffusion-resistant compds.)

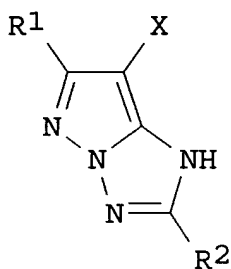
=> d 125 1-39 cbib abs fhitr hitind

L25 ANSWER 1 OF 39 HCA COPYRIGHT 2003 ACS

134:63788 **Silver halide color photographic**

material. Yoneyama, Hiroyuki; Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000352805 A2 20001219, 79 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-164452 19990610.

GI



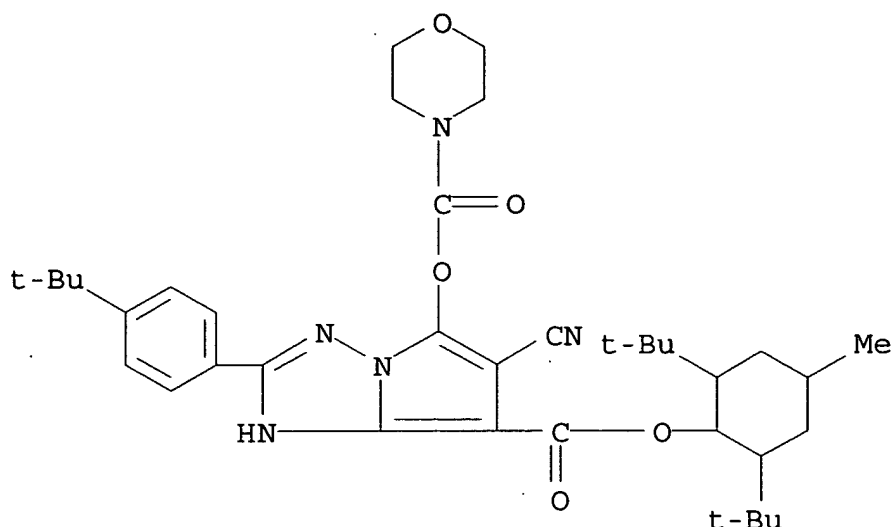
AB In the title full color **photog.** material, the **photog.** paper support is coated with biaxially drawn microporous polyolefin film and the **photog.** emulsion layer contains a pyrazolotriazole magenta **coupler** represented by a general formula I (R1, R2 = H, substituent; X = H, **coupling** group).

IT 188745-52-0P

(pyrrolo[1,2-b]triazole **cyan coupler** in color **photog.** paper showing excellent **photog.** properties)

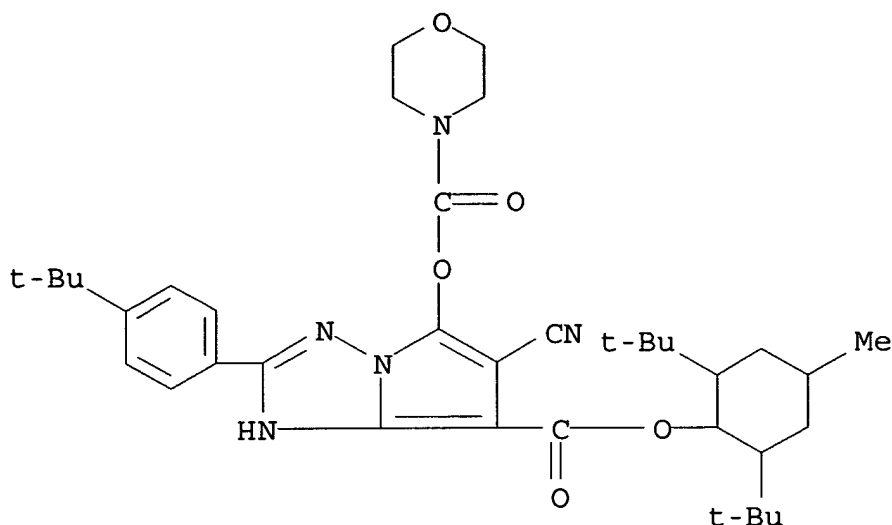
RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C001-30; G03C001-79; G03C007-388; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **silver halide color photog** paper  
pyrazolotriazole magnet **coupler**; polyolefin coated  
**photog** paper hardening agent pyrrolotriazole **cyan**  
**coupler**
- IT Color **photographic** paper  
Magenta **couplers**  
(color **photog.** paper contg. pyrazolotriazole magenta  
**coupler**)
- IT **Cyan couplers**  
Photographic hardening agents  
(color **photog.** paper contg. pyrazolotriazole magenta  
**coupler** and)
- IT 9003-07-0, Polypropylene  
(biaxially drawn microporous polyolefin layer on **photog**  
. paper support)
- IT 3278-22-6, Di(vinylsulfonyl)methane  
(hardening agent in color **photog.** paper showing  
excellent **photog.** properties)
- IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions  
15159-40-7, 4-Morpholinocarbonyl chloride 163119-16-2,  
2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(prepn. of pyrrolotriazole **cyan coupler** for  
**photog.** color paper)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(prepn. of pyrrolotriazole **cyan coupler** for  
**photog.** color paper)
- IT 131169-88-5 152827-98-0  
(pyrazolotriazole magenta **coupler** in color

- photog.** paper showing excellent **photog.** properties)
- IT 188745-52-0P  
(pyrrolotriazole **cyan coupler** in color **photog.** paper showing excellent **photog.** properties)
- L25 ANSWER 2 OF 39 HCA COPYRIGHT 2003 ACS  
134:23436 **Silver halide** color **photographic** material and color **image** formation. Yoneyama, Hiroyuki; Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000330238 A2 20001130, 65 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-141966 19990521.
- AB In the title **photog.** material possessing .gtoreq.3 **Ag halide** emulsion layers which are different in color sensitivity and contain a **Ag halide** emulsion comprising **Ag halide** emulsion grains having a **AgCl** content of .gtoreq.95 mol% on a reflective support, (i) the support is a water-resistant resin-coated support and .gtoreq.1 of the water-resistant resin layers between the support and the emulsion layer is a biaxially oriented polyolefin layer having fine pores, (ii) a polyolefin layer having no fine pore is formed between the above polyolefin layer and the emulsion layer in addn. to condition (i) or (iii) the support is obtained by coating a mixt. of a resin contg. .gtoreq.50 wt.% polyester formed by polycondensation of dicarboxylic acids with diols and a white pigment on at least the side to be coated with the emulsion. The material is developed following scanning exposure using an optical beam modulated on the basis of **image** information or is processed for .ltoreq.20 s in color development time to form color **images**. The material shows improved applicability to rapid processing and storage stability before use.
- IT 188745-52-0  
(**silver chloride**-rich **photog.** emulsion contg. triazole deriv. magenta or **cyan coupler**)
- RN 188745-52-0 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C001-79  
ICS G03C001-035; G03C005-08; G03C007-00; G03C007-38; G03C007-407
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST photog paper water resistant coating polyolefin; polyester  
photog paper pigment; cyan magenta photog  
coupler
- IT Photographic paper  
(photog. paper having water resistant resin coating)
- IT Polyesters, uses  
(photog. paper having water resistant resin coating)
- IT Photographic couplers  
Photographic emulsions  
(silver chloride-rich photog.  
emulsion contg. triazole deriv. magenta or cyan  
coupler)
- IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 13463-67-7,  
Titania, uses 25038-59-9, Poly(ethylene terephthalate), uses  
(photog. paper having water resistant resin coating)
- IT 124351-77-5 131169-88-5 152827-98-0 188745-52-0  
200049-62-3  
(silver chloride-rich photog.  
emulsion contg. triazole deriv. magenta or cyan  
coupler)

L25 ANSWER 3 OF 39 HCA COPYRIGHT 2003 ACS

133:342412 Silver halide photographic

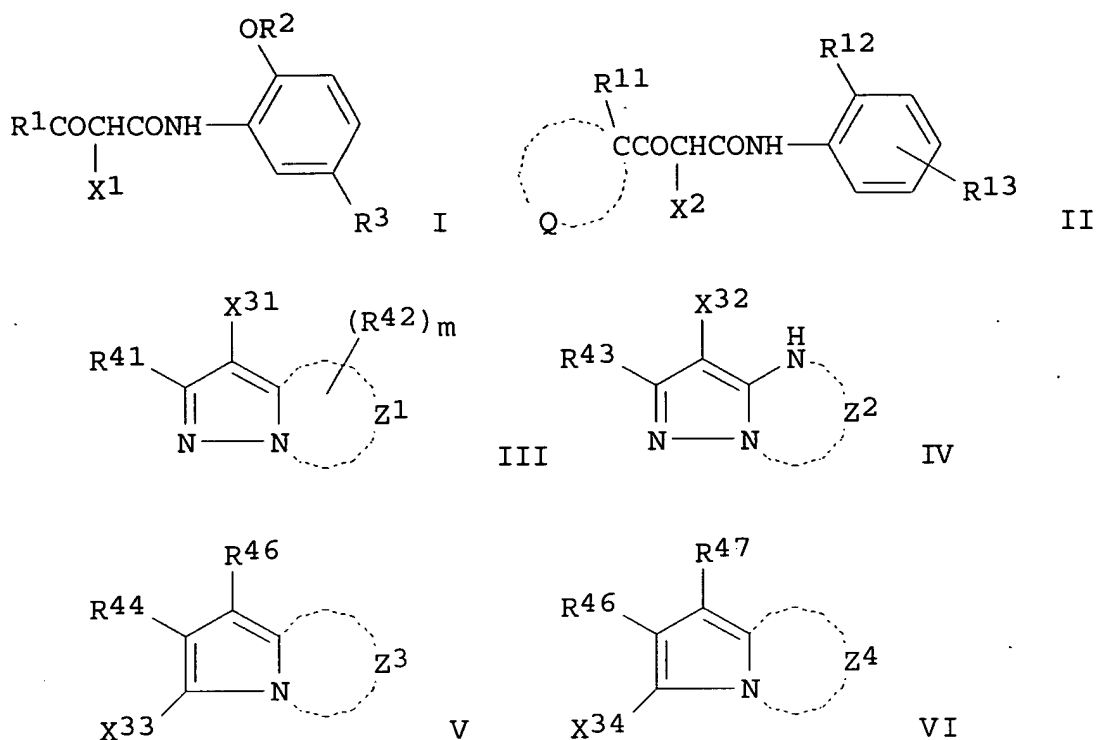
material using reflective support coated with polymer layer.

Yamazaki, Isatada; Nakamura, Takeshi (Konica Co., Japan). Jpn.

Kokai Tokyo Koho JP 2000305218 A2 20001102, 57 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-116541 19990423.

GI



AB In the material comprising a reflective support composed of a base paper coated with resin layers on both sides and .gtoreq.1 Ag halide emulsion layer and .gtoreq.1 non-photosensitive hydrophilic colloidal layer, the resin layer on the emulsion layer side contains a biaxially drawn polymer layer (thickness 10-30 .mu.m) contg. .gtoreq.10 wt.% white pigments. In the material, (1) the total gelatin in the emulsion layer and the colloidal layer may be .ltoreq.6.5 g/m<sup>2</sup>, (2) .gtoreq.1 of the emulsion layer may contain .gtoreq.1 yellow **coupler** selected from I, II, and R<sub>21</sub>R<sub>22</sub>NCOCX<sub>3</sub>HCONHR<sub>23</sub> (R<sub>1-2</sub> = alkyl, cycloalkyl, aryl; R<sub>3</sub> = H, halo, acylamino; X<sub>1-3</sub> = releasing group by the reaction with developer oxide; R<sub>11</sub> = monovalent substituent other than H; Q = nonmetal atoms to form 3-5-membered hydrocarbon ring or a heterocycle contg. N, S, O, or P; R<sub>12</sub> = H, halo, alkyl, alkoxy, aryloxy, amino; R<sub>13</sub> = substituent; R<sub>21-22</sub> = alkyl, aryl, heterocycle; R<sub>23</sub> = aryl, heterocycle; R<sub>21</sub> and R<sub>22</sub> may form a N-contg. heterocycle), or (3) .gtoreq.1 of the emulsion layer may contain .gtoreq.1 **cyan coupler** selected from III, IV, V, and VI (R<sub>41</sub>, R<sub>43</sub>, R<sub>46-47</sub> = H, substituent; R<sub>42</sub> = substituent; when m = 0, R<sub>41</sub> = substituent with Hammett's .sigma.p .gtoreq.0.20; when m = .gtoreq.1, .gtoreq.1 of R<sub>41</sub> and R<sub>42</sub> is substituent with Hammett's .sigma.p .gtoreq.0.20; Z<sub>1</sub>, Z<sub>3</sub> = nonmetal

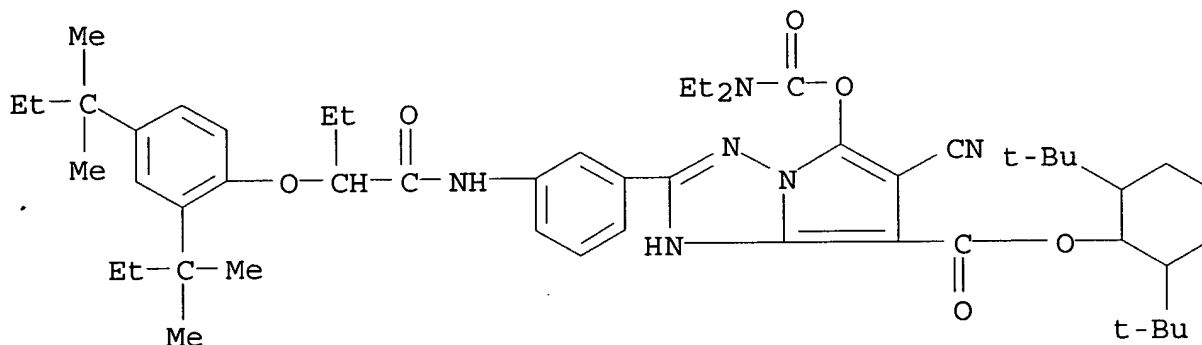
atoms to form 5-membered N-contg. heterocycle; Z2 = nonmetal atoms to form 6-membered heterocycle which may be substituted or condensed with benzene ring; Z4 = nonmetal atoms to form 6-membered heterocycle; R44-45 = substituent with  $\sigma_p \geq 0.20$ ; X31-34 = releasing group by coupling reaction with developer oxide). The material shows good color reproducibility, pressure resistance, cutting property, and suited for rapid processing.

IT 200137-20-8

(photog paper contg. amide compd. yellow coupler and azole compd. cyan coupler)

RN 200137-20-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]phenyl]-6-cyano-5-[[[(diethylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)cyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C001-79

ICS G03C001-74; G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog paper polymer layer white pigment; coupler

photog paper cyan yellow

IT Photographic couplers

(photog paper contg. amide compd. yellow coupler and azole compd cyan coupler)

IT Photographic paper

(photog. paper coated with biaxially drawn polymer contg. white pigment)

IT 127983-19-1 144916-81-4 150919-56-5 151645-05-5 154021-59-7

155218-20-5 170446-98-7 172650-64-5 200137-20-8

208345-82-8 256367-16-5 267890-39-1 303189-34-6 303189-36-8

303189-37-9 303189-38-0

(photog paper contg. amide compd. yellow coupler and azole compd. cyan coupler)

IT 9003-07-0, Polypropylene 9003-53-6, Polystyrene

(photog. paper coated with biaxially drawn polymer contg. white pigment)

IT 13463-67-7, Titania, uses  
(**photog.** paper coated with biaxially drawn polymer  
contg. white pigment)

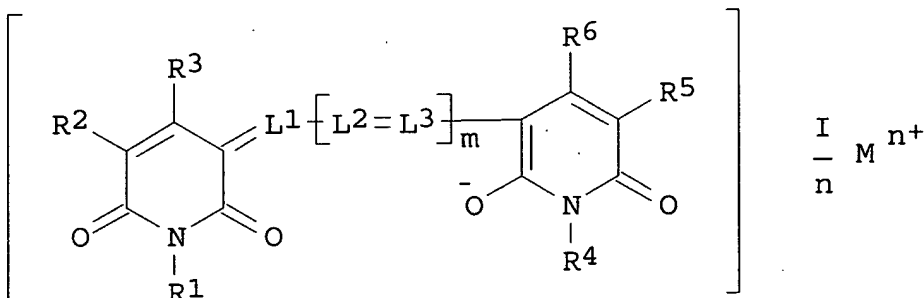
L25 ANSWER 4 OF 39 HCA COPYRIGHT 2003 ACS

133:215420 **Silver halide color photographic**

material with high sharpness. Takata, Kiyoto; Kimura, Keizo;  
Takahashi, Osamu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai  
Tokkyo Koho JP 2000241936 A2 **20000908**, 98 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1999-358018 19991216. PRIORITY: JP  
1998-363003 19981221.

GI



AB The title **photog.** material, possessing .gtoreq.3  
photosensitive hydrophilic colloid layers contg. each of yellow,  
magenta, and **cyan** dye-forming **couplers** and  
**Ag halide** emulsion grains different in color  
sensitivity from each other and .gtoreq.1 non-photosensitive  
hydrophilic colloid layers on a transparent support, contains a  
compd. I (R1, R4 = H, aliph., arom. or heterocyclic group, NR7R8,  
NR7CONR7R8, NR8COR9, NR8SO2R9; R2, R5 = H, aliph., arom. or  
heterocyclic group, CN, sulfo, NR7R8, NR8COR9, NR8SO2R9, NR7CONR7R8,  
CO2R7, CONR7R8, COR9, SO2R9, SO2NR7R8; R3, R6 = OR7, CO2R7, COR9,  
CONR7R8, NR7R8, NR8COR9, NR8SO2R9, NR7CONR7R8, SO2R9, SO2NR7R8, CN;  
R7, R8 = H, aliph. or arom. group; R9 = aliph. or arom. group, R7  
and R8 or R8 and R9 may link each other to form a 5- or 6-membered  
ring; L1-3 = methine; m = 0-2; Mn+ = cation with n valence; n = 1-3)  
in 1 of these layers and a solid fine particle dispersion of a dye  
DXy (D = chromophore-contg. group; X = dissocg. H or a compd. having  
dissocg. H; y = 1-7) in .gtoreq.1 of the non-photosensitive layers  
and the pH value of the coating of the material is 4.6-6.4. The  
material shows high sharpness and environmental stability upon  
exposure and is capable of simplifying the processing.

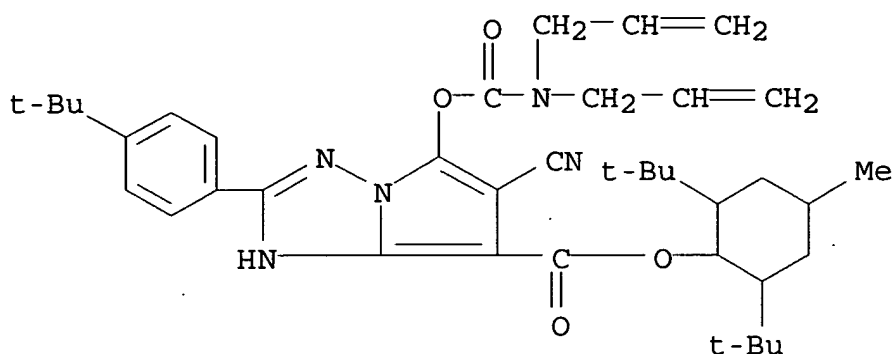
IT **184947-09-9P**  
(triazole deriv. **photog.** **cyan** coupler  
)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,



6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C001-83  
ICS G03C001-035; G03C007-38
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
Section cross-reference(s): 41
- ST **photog** film antihalation dye; solid dye dispersion  
**photog** film; triazole deriv **cyan coupler**  
**photog**
- IT **Photographic films**  
(**photog.** film contg. antihalation dye and solid dye  
dispersion)
- IT **Cyan couplers**  
(triazole deriv. **photog.** **cyan coupler**  
)
- IT 93951-12-3  
(**photog.** **cyan coupler**;  
**photog.** film contg. antihalation dye and solid dye  
dispersion)
- IT 77666-73-0 117573-82-7 122882-19-3 122882-20-6 136051-94-0  
137641-46-4 290360-63-3 290360-64-4  
(**photog.** film contg. antihalation dye and solid dye  
dispersion)
- IT 190436-30-7P 194419-30-2P 219952-45-1P 219952-46-2P  
(prepn. of triazole deriv. **photog.** **cyan**  
**coupler**)
- IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 25761-72-2, Diallylcarbamoyl chloride 163119-16-2,  
2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(prepn. of triazole deriv. **photog.** **cyan**  
**coupler**)
- IT 184947-09-9P 188745-52-0P  
(triazole deriv. **photog.** **cyan coupler**  
)

133:170197 **Silver halide photographic**

light-sensitive material and **image** forming method.

Yoneyama, Hiroyuki; Ohzeki, Katsuhisa; Deguchi, Yasuaki; Takada, Katsuyuki (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 1024402 A2 20000802, 226 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXWDW. APPLICATION: EP 2000-101629 20000128. PRIORITY: JP 1999-22904 19990129; JP 1999-22951 19990129; JP 1999-23318 19990129; JP 1999-127612 19990507.

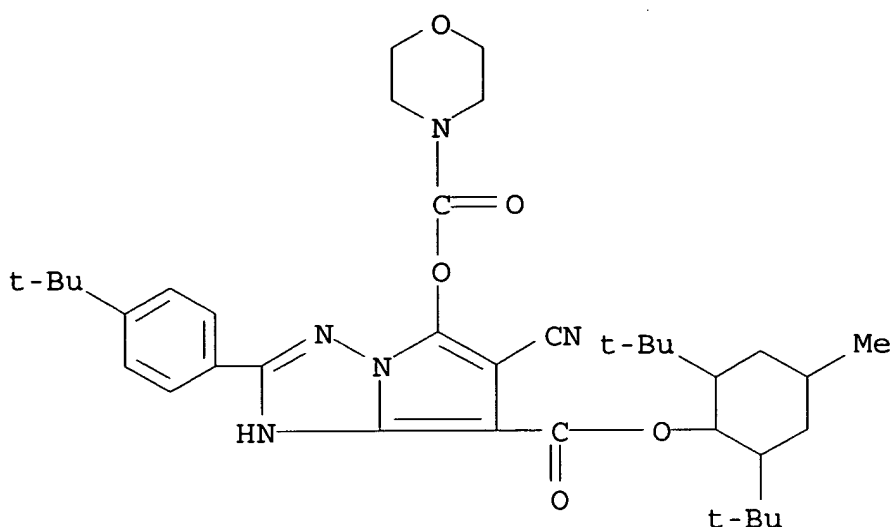
AB The invention relates to a **silver halide photog.** light-sensitive material having excellent rapid processing suitability, and to a method of forming an **image** using the same. There is disclosed a **Ag halide photog.** light-sensitive material comprising at least a **Ag halide** emulsion layer contg. a yellow dye-forming **coupler**, a **Ag halide** emulsion layer contg. a magenta dye-forming **coupler** and a **Ag halide** emulsion layer contg. a **cyan** dye-forming **coupler**, on a support, wherein: the **Ag halide** emulsion layer contg. a yellow dye-forming **coupler** is located more apart from the support than .gtoreq.1 of the **Ag halide** emulsion layer contg. a magenta dye-forming **coupler** and the **Ag halide** emulsion layer contg. a **cyan** dye-forming **coupler**, and **Ag halide** grains contained in the **Ag halide** emulsion layer contg. a yellow dye-forming **coupler** comprises a high **AgCl** emulsion in which the content of **Ag halide** is 80 mol% or more. There is also disclosed a method of forming an **image** using the light-sensitive material.

IT 188745-52-0

(emulsion layer for **photog.** light-sensitive material with excellent rapid-processing suitability using)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-30  
ICS G03C007-396; G03C007-407; G03C007-42
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **photog imaging** method
- IT Light-sensitive materials  
Photographic couplers  
Photographic emulsions  
Photographic films  
(emulsion layer for **photog.** light-sensitive material  
with excellent rapid-processing suitability using)
- IT 208343-47-9 287730-77-2  
(UV-absorbing agent; emulsion layer for **photog.**  
light-sensitive material with excellent rapid-processing  
suitability using)
- IT 9002-89-5, Polyvinyl alcohol  
(acryl-modified; emulsion layer for **photog.**  
light-sensitive material with excellent rapid-processing  
suitability using)
- IT 122-99-6P 2634-33-5P, 1,2-Benzisothiazol-3(2H)-one 2736-18-7P  
4247-02-3P 26098-04-4P 52093-21-7P 66710-66-5P 93629-90-4P  
287730-69-2P 287916-51-2P  
(coating soln. for constitutional layers of **photog.**  
light-sensitive material with excellent rapid-processing  
suitability using)
- IT 84-61-7 106-84-3 109-43-3 577-11-7 614-33-5 903-19-5  
2211-98-5 2432-87-3 2528-39-4 3846-71-7 3864-99-1  
3896-11-5 5377-19-5 7631-86-9, Silica, uses 9003-39-8,  
Poly(vinylpyrrolidone) 9016-00-6, Poly(dimethylsiloxane)  
25267-41-8, N-tert-Butyl acrylamide homopolymer 25973-55-1  
26967-76-0 27084-89-5 31037-84-0 31900-57-9,  
Poly(dimethylsiloxane) 33145-10-7 36631-30-8 59272-84-3

- 71067-09-9 71086-85-6 85238-64-8 89929-65-7 93951-12-3  
 115895-09-5 117827-06-2 122586-52-1 124351-77-5 137193-60-3  
 142776-95-2 158574-65-3 168689-49-4 168770-02-3 180675-30-3  
**188745-52-0** 202483-62-3 202483-63-4 219562-14-8  
 287730-74-9 287730-75-0 287730-76-1  
 (emulsion layer for **photog.** light-sensitive material  
 with excellent rapid-processing suitability using)  
 IT 70950-42-4 95050-16-1 131169-88-5 152827-98-0 287732-68-7  
 (emulsion layer for **photog.** light-sensitive material  
 with excellent rapid-processing suitability using mixt. contg.)  
 IT 34233-64-2  
 (fluorescent brightening agent; emulsion layer for **photog.**  
 . light-sensitive material with excellent rapid-processing  
 suitability using)  
 IT 1314-13-2, Zinc oxide, uses 2397-00-4 9002-88-4 13463-67-7,  
 Titanium dioxide, uses 57455-37-5, Ultramarine  
 (laminated paper for **photog.** light-sensitive material  
 with excellent rapid-processing suitability using)  
 IT 68392-94-9P 90895-32-2P 166523-33-7P  
 (prepn. of cubic **silver halide** emulsion for  
**photog.** light-sensitive material with excellent  
 rapid-processing suitability using)  
 IT 41665-49-0 90895-26-4 117633-60-0 125348-03-0 160911-24-0  
 (prepn. of green sensitive emulsion layer for **silver**  
**halide photog.** light-sensitive material with  
 excellent rapid-processing suitability using)  
 IT 149-45-1 1934-21-0 2503-56-2, 4-Hydroxy-6-methyl-1,3,3a,7-  
 tetraazaindene 7772-98-7 25035-82-9, Butyl acrylate-methacrylic  
 acid copolymer 160683-19-2 224323-12-0 287730-70-5  
 (prepn. of tabular **silver halide** emulsion for  
**photog.** light-sensitive material with excellent  
 rapid-processing suitability using)  
 IT **7783-90-6P, Silver chloride**, reactions  
 13461-16-0P 80815-18-5P 86893-76-7P  
 (prepn. of tabular **silver halide** emulsion for  
**photog.** light-sensitive material with excellent  
 rapid-processing suitability using)  
 IT 16903-35-8, Chloroauric acid  
 (prepn. of tabular **silver halide** emulsion for  
**photog.** light-sensitive material with excellent  
 rapid-processing suitability using)  
 IT 47938-06-7P  
 (prepn. of tabular **silver halide** emulsion for  
**photog.** light-sensitive material with excellent  
 rapid-processing suitability using)

L25 ANSWER 6 OF 39 HCA COPYRIGHT 2003 ACS

133:112355 **Silver halide color photographic**

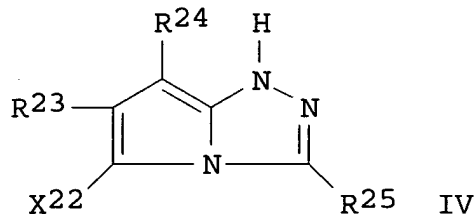
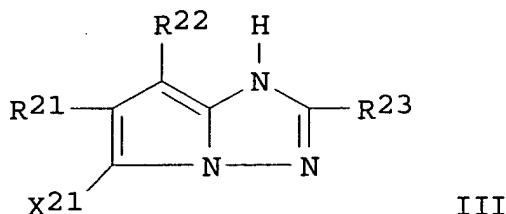
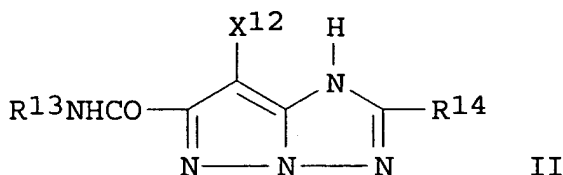
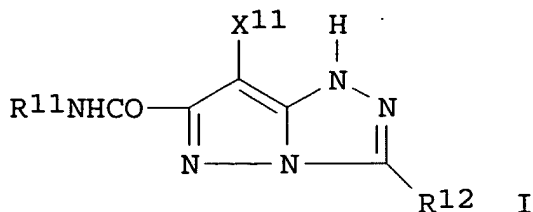
material with excellent color reproduction and reduced fog.

Ishidai, Hiroshi; Tanaka, Shigeo (Konica Co., Japan). Jpn. Kokai

Tokkyo Koho JP 2000199946 A2 **20000718**, 65 pp. (Japanese).

CODEN: JKXXAF. APPLICATION: JP 1998-377437 19981230.

GI

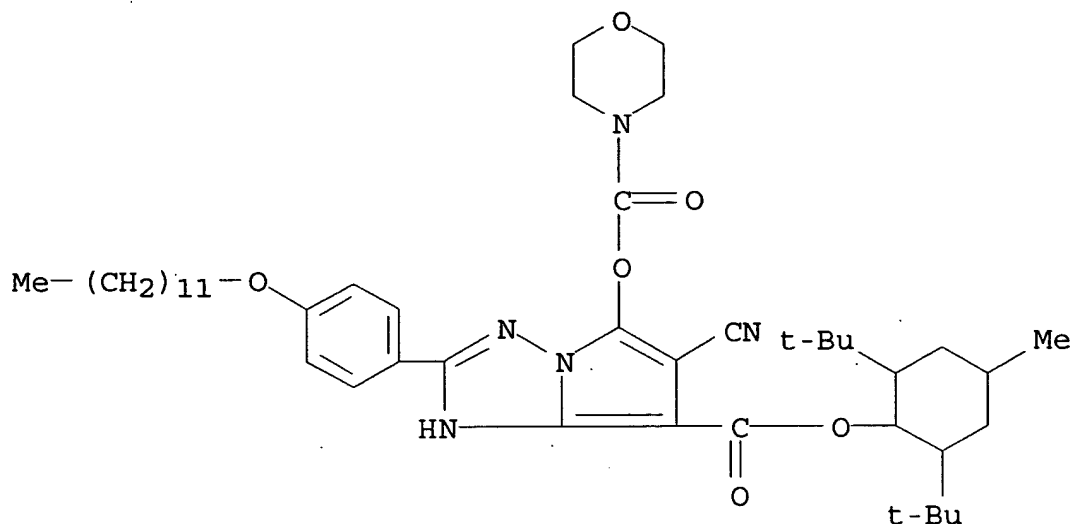


AB The title **photog.** material contains a **cyan coupler** I, II (R11, R13 = branched alkyl, substituted alkyl, substituted aryl, heterocycle; R12, R14 = substituent; X11, X12 = H, atom or group capable of cleaving upon reaction with color **photog.** developer oxide), III, or IV (R21-26 = electron withdrawing group; X21, X22 = H, atom or group capable of cleaving upon reaction with color **photog.** developer oxide) in a **Ag halide** emulsion layer.

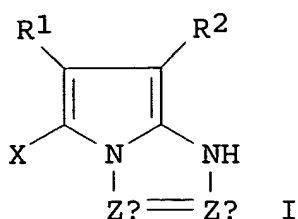
IT 282732-88-1  
(cyan coupler in Ag halide color **photog.** paper with excellent color reprodn. and reduced fog)

RN 282732-88-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(dodecyloxy)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C001-035; G03C001-42; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **silver halide color photog** paper  
**cyan coupler**
- IT Color **photographic** paper  
Cyan couplers  
(Ag halide color **photog.** material  
with excellent color reprodn. and reduced fog)
- IT 209536-40-3 211428-00-1 211428-02-3 282732-85-8 282732-86-9  
282732-87-0 282732-88-1 282732-89-2  
(cyan coupler in Ag halide  
color **photog.** paper with excellent color reprodn. and  
reduced fog)
- IT 25746-66-1 195253-70-4 282732-90-5 282732-91-6 282732-92-7  
(stain-resistant agent in Ag halide color  
**photog.** paper with excellent color reprodn. and reduced  
fog)
- L25 ANSWER 7 OF 39 HCA COPYRIGHT 2003 ACS  
133:81523 **Silver halide** color cinephotographic film  
with high chromaticity. Sakai, Shuichi; Takahashi, Osamu (Fuji  
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000187310  
A2 20000704, 85 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1998-363002 19981221.
- GI



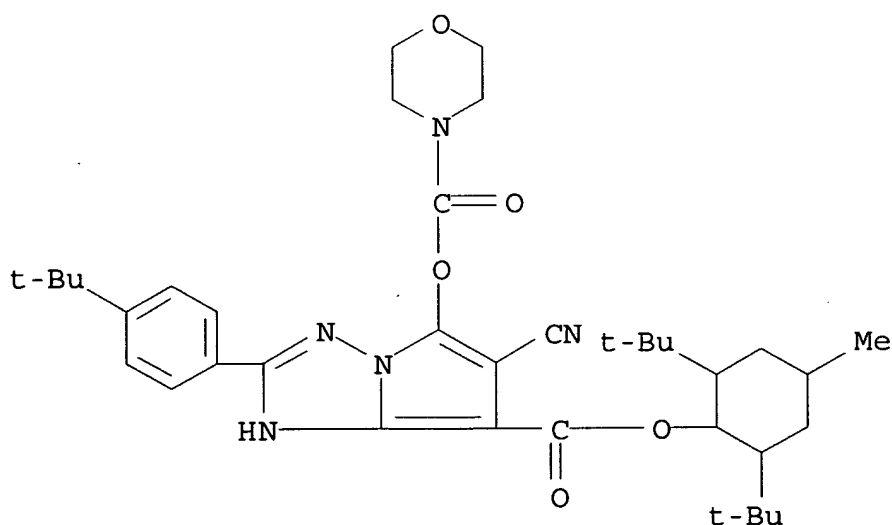
AB The material involves a support and (A) .gtoreq.1 light-insensitive hydrophilic layer placed between the support and a photosensitive **Ag halide** layer nearest to the support and (B) color-forming emulsion layers in which .gtoreq.1 **cyan** color-forming emulsion layer contains a **cyan coupler I** (Za, Zb = CR<sub>3</sub>:, N.tplbond.; R<sub>1</sub>, R<sub>2</sub> = electron-withdrawing group with Hammett's .sigma.p value .gtoreq.20; R<sub>3</sub> = H, substituent; X = H, group released in **coupling** reaction with an arom. primary amine color developer). The film shows high chromaticity, improved durability, and both sharpness and white background.

IT 188745-52-0P

(**silver halide** color cinephotog. film contg. specified **cyan coupler** with high chromaticity)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-22

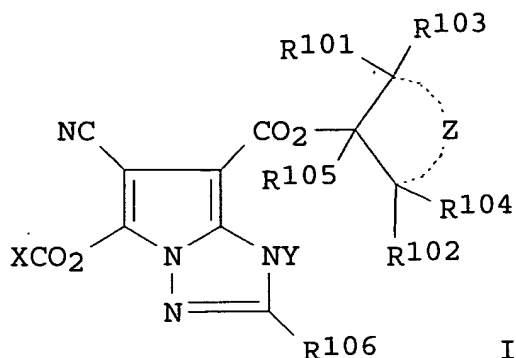
ICS G03C001-83; G03C007-38  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **silver halide photog** emulsion  
**cyan coupler**; cinephotog film **silver**  
**halide emulsion coupler**  
IT **Photographic films**  
(cinephotog.; **silver halide** color cinephotog.  
film contg. specified **cyan coupler** with high  
chromaticity)  
IT **Cyan couplers**  
(**silver halide** color cinephotog. film contg.  
specified **cyan coupler** with high  
chromaticity)  
IT 190436-30-7P 194419-30-2P  
(intermediate; **silver halide** color  
cinephotog. film contg. specified **cyan coupler**  
from)  
IT 194419-31-3 200049-66-7  
(intermediate; **silver halide** color  
cinephotog. film contg. specified **cyan coupler**  
from)  
IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 163119-16-2 194419-32-4  
(**silver halide** color cinephotog. film contg.  
specified **cyan coupler** from)  
IT 188745-52-0P  
(**silver halide** color cinephotog. film contg.  
specified **cyan coupler** with high  
chromaticity)  
IT 184947-09-9  
(**silver halide** color cinephotog. film contg.  
specified **cyan coupler** with high  
chromaticity)

L25 ANSWER 8 OF 39 HCA COPYRIGHT 2003 ACS

132:341117 **Silver halide photographic**  
material with improved processing stability. Taniguchi, Makoto  
(Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP  
2000131812 A2 20000512, 47 pp. (Japanese). CODEN:  
JKXXAF. APPLICATION: JP 1998-321491 19981027.

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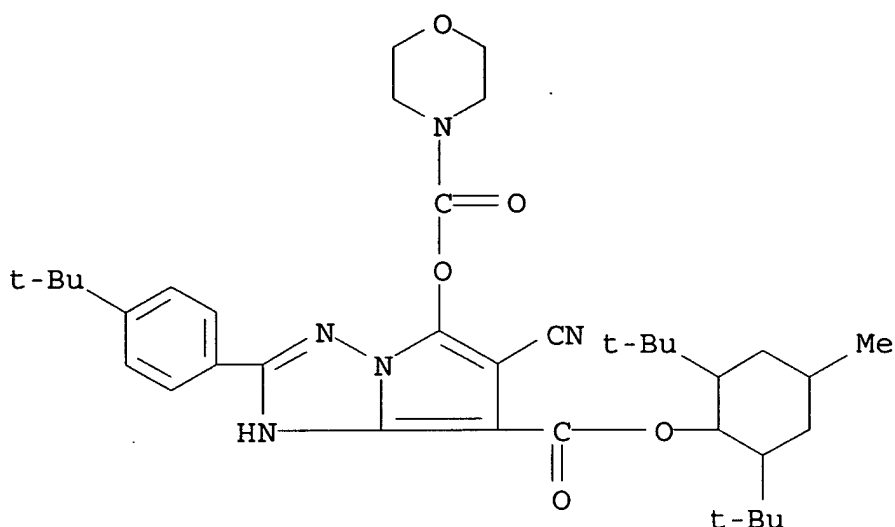


AB The title **photog.** material contains .gtoreq.1 compd.  
 R2ZR4:CR1Y(:O)R3 (Y, Z = C; R1, R2 = OH, amino, alkylamino, anilino, heterocyclic amino, acylamino, alkylsulfonylamino, arylsulfonylamino, heterocyclic sulfinylamino, alkoxycarbonylamino, carbamoylamino, sulfamoylamino, SH, alkylthio, arylthio, heterocyclic thio; R3 = H, group linking to Y by C, O or N atom; R4 = H, group linking to Z by C, O or N atom, R3 and R4 may form a ring) and .gtoreq.1 **coupler** of the formula I (R101, R102 = alkyl, aryl; R103-105 = H, alkyl, aryl; Z = nonmetal atoms required to form a satd. ring; R106 = substituent; X = heterocyclic group, substituted amino, aryl; Y = H, group releasing upon color development). The material is independent of the variation of conditions in processing and the **cyan coupler** forms **images** stably even if the pH of developing bath rises upon development.

IT 188745-52-0  
 (photog. paper contg. enone compd. and pyrrolotriazole  
**cyan coupler**)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

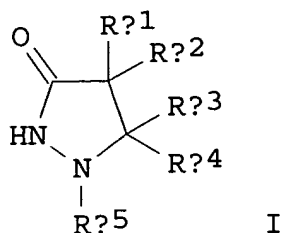


- IC ICM G03C007-38  
ICS G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST pyrrolotriazole **cyan coupler photog**  
paper; enone compd **photog** paper
- IT **Cyan couplers**  
Photographic paper  
(**photog.** paper contg. enone compd. and pyrrolotriazole  
**cyan coupler**)
- IT 3290-92-4P  
(bromination of; prepn. of pyrrolotriazole deriv. **photog**  
**cyan coupler**)
- IT 188745-52-0 267650-14-6  
(**photog.** paper contg. enone compd. and pyrrolotriazole  
**cyan coupler**)
- IT 636-38-4 15042-01-0 34421-11-9 114625-74-0 184947-09-9  
(**photog.** paper contg. enone compd. and pyrrolotriazole  
**cyan coupler**)
- IT 1889-96-9P 194419-31-3P  
(**photog.** paper contg. enone compd. and pyrrolotriazole  
**cyan coupler**)
- IT 85391-84-0P 190436-30-7P 194419-30-2P  
(prepn. of pyrrolotriazole deriv. **photog. cyan**  
**coupler**)
- IT 105-34-0, Methyl cyanoacetate 15625-89-5 25761-72-2,  
Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-  
methylcyclohexanol 200049-66-7  
(prepn. of pyrrolotriazole deriv. **photog. cyan**  
**coupler**)

## 132:42772 Silver halide color photographic

material with reduced color mixture. Yoshioka, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11344792 A2 19991214 Heisei, 69 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1998-169302 19980602.

GI



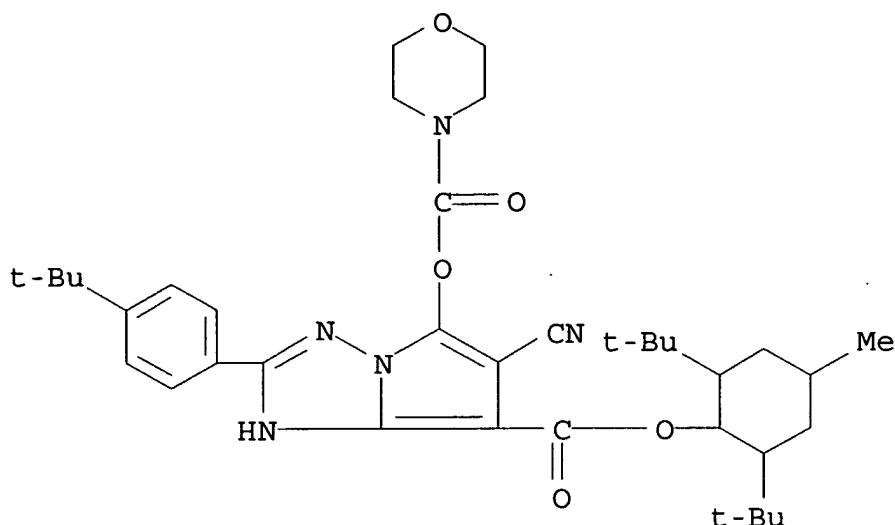
AB In the title **photog.** material comprising on a support at least 1 blue-sensitive (yellow coloring) emulsion layer, at least 1 green-sensitive (magenta coloring) emulsion layer, at least 1 red-sensitive (**cyan** coloring) emulsion layer, and at least 1 light-insensitive hydrophilic colloidal layer, one of the above layer contains phenidone I (Ra1, Ra2 = H, alkyl, aryl; Ra3, Ra4 = H, alkyl, aryl; Ra5 = aryl) and hydroxylamine Rb1N(Rb2)OH (Rb1, Rb2 = alkyl, alkenyl, aryl, heterocycle, acyl, alkoxycarbonyl, carbamoyl). The **cyan** coloring emulsion layer may contain a specified hydroquinone **cyan coupler**.

IT 188745-52-0P

(hydroquinone **cyan coupler** in red-sensitive emulsion layer of **silver halide color photog. paper**)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-392  
ICS G03C007-38
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **silver halide color photog** material;  
hydroquinone **cyan coupler** phenidone  
hydroxylamine
- IT Color **photographic** paper  
Cyan couplers  
(**silver halide color photog.**  
material with reduced color mixt.)
- IT 188745-52-0P  
(hydroquinone **cyan coupler** in red-sensitive  
emulsion layer of **silver halide color**  
**photog.** paper)
- IT 7427-67-0, N,N-Didodecylhydroxylamine 252647-36-2  
(hydroxylamine deriv. in red-sensitive emulsion layer of  
**silver halide color photog.** paper)
- IT 220323-19-3  
(phenidone deriv. in red-sensitive emulsion layer of  
**silver halide color photog.** paper)
- IT 202483-63-4P  
(phenidone deriv. in red-sensitive emulsion layer of  
**silver halide color photog.** paper)
- IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions  
15159-40-7, Morpholinocarbonyl chloride 163119-16-2,  
2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(prepn. of hydroquinone **cyan coupler** in  
red-sensitive emulsion layer of **silver halide**  
color **photog.** paper)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(prepn. of hydroquinone **cyan coupler** in

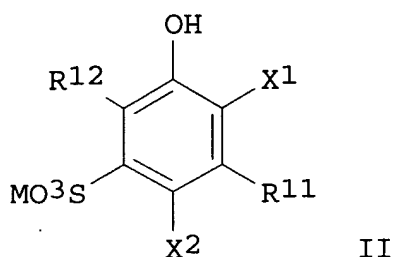
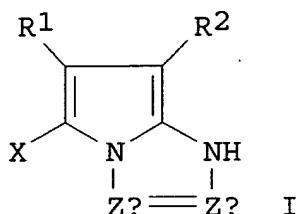
red-sensitive emulsion layer of **silver halide**  
color **photog.** paper)

- IT 108-59-8, Propanedioic acid, dimethyl ester 112-82-3  
(prepn. of phenidone deriv. in red-sensitive emulsion layer of  
**silver halide** color **photog.** paper)
- IT 23130-42-9P 53633-31-1P 53633-32-2P  
(prepn. of phenidone deriv. in red-sensitive emulsion layer of  
**silver halide** color **photog.** paper)

L25 ANSWER 10 OF 39 HCA COPYRIGHT 2003 ACS

131:293252 **Silver halide** color **photographic**  
material. Otani, Kuniaki (Fuji Photo Film Co., Ltd., Japan). Jpn.  
Kokai Tokkyo Koho JP 11282138 A2 19991015 Heisei, 78 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-100409 19980327.

GI



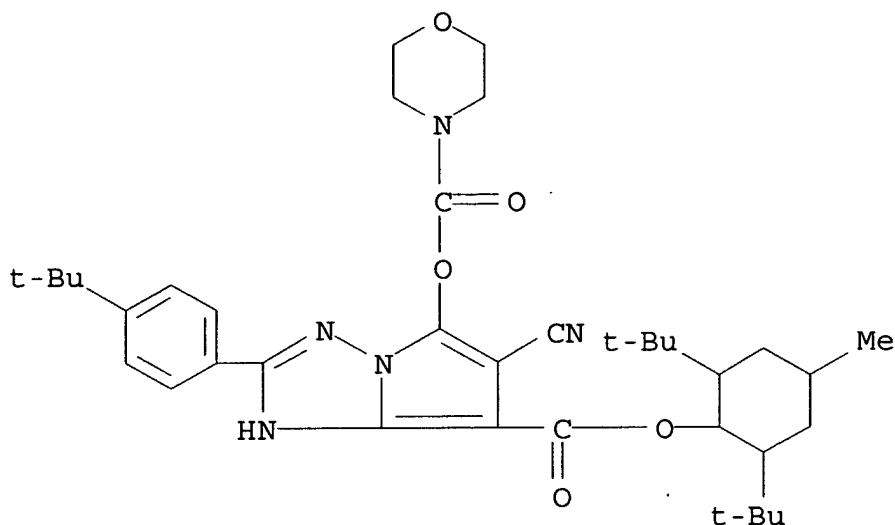
- AB In the title **photog.** material possessing .gtoreq.1 yellow dye-forming **coupler**-contg., .gtoreq.1 magenta dye-forming **coupler**-contg., and .gtoreq.1 **cyan** dye-forming **coupler**-contg. **Ag halide** emulsion layers on a support, the **cyan** dye-forming **coupler**-contg. emulsion layer contains .gtoreq.1 **cyan coupler** I [Za, Zb = CR3, N, either one is N and the other CR3; R1, R2 = electron-attracting group with Hammett's substituent const. .sigma.p .gtoreq.0.20, the sum of .sigma.p values of R1 and R2 is .gtoreq.0.65; R3 = H, substituent; X = H, group releasing upon **coupling** with an oxidized arom. primary color developing agent, R1-3 and X may be divalent groups which link to a polymer higher than dimer or polymer chain to form a (co)polymer] and a Ag(Br,Cl,I), Ag(Br,Cl) or **AgCl** emulsion having a **AgCl** content of .gtoreq.95 mol%, and .gtoreq.1 compd. II [X1, X2 = H, OH, halo, SO3H (or its salt), CO2H (or its salt), NR13R14, NHSO2R15, 1 of X1 and X2 should be OH; R11, R12 = H, substituent; R13, R14 = H, alkyl, aryl, heterocyclic group, R13 and R14 may link each other to form a heterocycle; R15 = alkyl, aryl, amino, heterocyclic group; M = H, monovalent alkali metal] is contained in the material during **Ag halide** grain formation and/or chem. ripening. The material shows improved color reproducibility and stable sensitivity independent of the variation in humidity upon exposure and provides durable color **images**

IT 188745-52-0

(pyrrolotriazole deriv. photog. cyan coupler)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICS G03C001-035; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog emulsion phenolic compd; cyan sensitizer  
pyrrolotriazole compd photog

IT Cyan couplers

(pyrrolotriazole deriv. photog. cyan coupler)

IT Photographic emulsions

(silver chloride-rich photog. emulsion contg. phenolic compd.)

IT 190436-30-7P

(bromination of; prepn. of pyrrolotriazole deriv. photog. cyan coupler)

IT 149-45-1

(photog. film contg. phenolic compd.)

IT 7440-80-4

(photog. film contg. phenolic compd.)

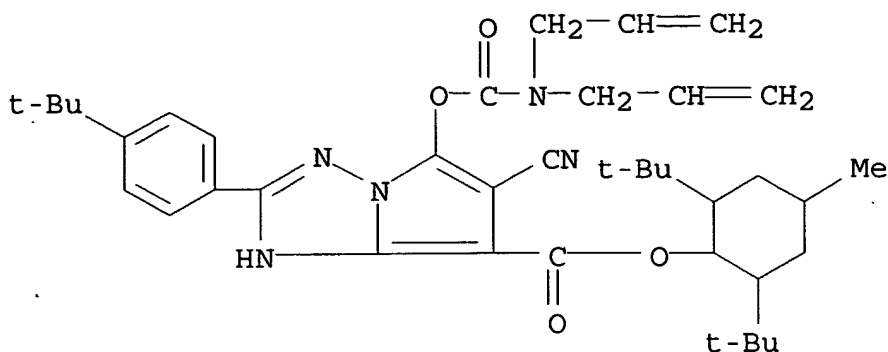
IT 34421-11-9 67831-35-0

(photog. film contg. phenolic compd. and ketone compd.)

IT 194419-30-2P 194419-31-3P

(prepn. of pyrrolotriazole deriv. photog. cyan

- coupler)**  
IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2, Diallylcarbamoyle chloride 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4 (prepn. of pyrrolotriazole deriv. **photog. cyan coupler)**
- IT 179330-29-1 188745-52-0 (pyrrolotriazole deriv. **photog. cyan coupler)**
- IT 179330-32-6P (pyrrolotriazole deriv. **photog. cyan coupler)**
- L25 ANSWER 11 OF 39 HCA COPYRIGHT 2003 ACS  
131:264719 Color **image** formation and desilvering processing composition containing guanidine compound. Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11265046 A2 19990928 Heisei, 82 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-84894 19980316.
- AB In the title process in which a **silver halide** color **photog.** material, possessing .gtoreq.1 yellow-coloring, .gtoreq.1 magenta-coloring, and .gtoreq.1 **cyan-coloring Ag halide** emulsion layers and .gtoreq.1 non-photosensitive hydrophilic colloid layer on a support, is subjected to development, desilvering, washing and/or stabilizing, and drying steps following imagewise exposure, .gtoreq.1 of the desilvering and washing and/or stabilizing steps is carried out in the presence of a compd.  $\text{NH}_2\text{C}(\text{:NH})\text{NR}_1\text{R}_2$  ( $\text{R}_1, \text{R}_2 = \text{H}$ , alkyl, aralkyl, the total C no. of  $\text{R}_1$  and  $\text{R}_2$  is 3-8,  $\text{R}_1$  .noteq.  $\text{R}_2$  .noteq.  $\text{H}$ ,  $\text{R}_1$  and  $\text{R}_2$  may link each other to form a ring). A desilvering processing compn. contg. the above compd. is also claimed. Residual developer is well removed by using the compd. and **photog.** material gives **images** with improved color reproducibility without stains.
- IT 184947-09-9P (**photog. cyan coupler**)
- RN 184947-09-9 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-42  
ICS G03C001-035; G03C007-32; G03C007-384
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **photog** processing desilvering guanidine compd; developer  
removing agent guanidine **photog** processing
- IT **Photographic** processing  
(**photog.** desilvering, stabilizing, or washing process  
using guanidine compd. as developer-removing agent)
- IT **Cyan couplers**  
(pyrazole or tetrazole deriv. **photog.** cyan  
coupler)
- IT 190436-30-7P  
(bromination of; prepn. of **photog.** triazole deriv.  
cyan coupler)
- IT 184947-09-9P 188745-52-0P  
(**photog.** cyan coupler)
- IT 202483-63-4  
(**photog.** cyan coupler)
- IT 462-69-1P 244755-95-1P  
(**photog.** desilvering, stabilizing, or washing process  
using guanidine compd. as developer-removing agent)
- IT 462-25-9 35144-72-0  
(**photog.** desilvering, stabilizing, or washing process  
using guanidine compd. as developer-removing agent)
- IT 23130-42-9P 53633-31-1P 53633-32-2P 194419-30-2P  
194419-31-3P 200049-66-7P  
(prepn. of **photog.** triazole deriv. cyan  
coupler)
- IT 100-63-0, Phenylhydrazine 105-34-0, Methyl cyanoacetate  
106-65-0, Dimethylsuccinate 112-82-3, 1-Bromohexadecane  
15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2,  
Diallylcarbonyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-  
methylcyclohexanol 194419-32-4  
(prepn. of **photog.** triazole deriv. cyan  
coupler)



## 131:122889 Silver halide color photographic

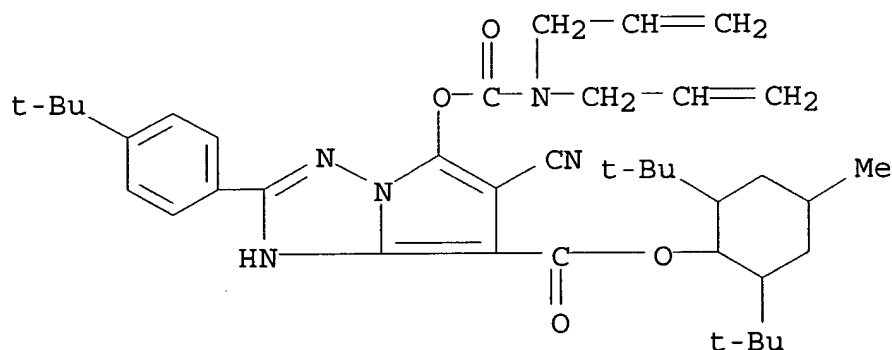
material. Mikoshiba, Hisashi; Soejima, Shin; Shimada, Yasuhiro; Takahashi, Osamu; Deguchi, Yasuaki (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 932079 A1 19990728, 174 pp.  
 DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1999-101049 19990122. PRIORITY: JP 1998-25208 19980123; JP 1998-76596 19980310; JP 1998-78512 19980312; JP 1998-80368 19980312; JP 1998-288708 19980928.

AB There is disclosed a **silver halide color photog.** material comprising a compd. of formula  $R_1C(R_7)n[C(R_2)(R_3)OCOCR_4=CR_5R_6]_{3-n}$  wherein  $R_1$  is a hydrogen atom, an alkyl group having 1 to 30 carbon atoms, an alkenyl group having 2 to 30 carbon atoms, or an aryl group;  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  each independently represents a hydrogen atom or an alkyl group having 1 to 30 carbon atoms; and  $n$  is 0 or 1. The color **photog.** material provide **cyan images** of excellent fastness.

IT 184947-09-9  
 (color **photog.** emulsions for improved **cyan** dye **image** formation contg. vinyl compds. and)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-30

ICS G03C007-38

ICA C07C069-533

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photog** material **cyan image** improved fastness; vinyl stabilizer color **photog** material

IT **Photographic** emulsions  
 (color; contg. vinyl compds. and pyrrolotriazole **cyan** dye formers)

IT **Photographic** stabilizers  
 (vinyl compds. for color **photog.** materials for forming

- cyan images** of improved fastness)
- IT 1820-47-9 3290-92-4 3524-68-3 4986-89-4 15625-89-5,  
Trimethylolpropane triacrylate 85391-84-0 232947-49-8  
232947-50-1 232947-51-2 232947-52-3 232947-53-4 232947-54-5  
(color **photog.** emulsions for improved **cyan**  
dye **image** formation contg. pyrrolotriazole  
couplers and)
- IT 31037-84-0 99141-89-6 117827-06-2 151019-65-7 178743-91-4  
184947-09-9 188745-52-0 200049-62-3  
200110-90-3 200137-20-8 211051-73-9 211051-76-2  
219553-72-7 232947-55-6 232947-56-7 232947-57-8  
232947-58-9 232947-59-0 232947-60-3 232951-89-2  
(color **photog.** emulsions for improved **cyan**  
dye **image** formation contg. vinyl compds. and)
- IT 25035-82-9, Butyl acrylate-methacrylic acid copolymer 140201-11-2  
211051-99-9 211052-01-6 211052-05-0 220323-13-7 232947-62-5  
232947-63-6 232947-64-7 232947-65-8 232947-66-9 232951-90-5  
232951-91-6  
(color **photog.** emulsions for improved **cyan**  
dye **image** formation contg. vinyl compds.,  
pyrrolotriazole **cyan couplers** and)
- IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(prepn. and reaction in prepg. pyrrolotriazole **cyan**  
**photog. coupler**)
- IT 4445-11-8P 73923-17-8P 232947-67-0P  
(prepn. and reaction in prepg. reagent for color **photog.**  
materials)
- IT 202483-63-4P  
(prepn. and use in color **photog.** emulsions for improved  
**cyan dye image** formation)
- IT 105-34-0, Methyl cyanoacetate 15159-40-7, 4-Morpholinecarbonyl  
chloride 163119-16-2 194419-32-4  
(reaction in prepg. pyrrolotriazole **cyan photog.**  
coupler)
- IT 106-65-0, Methyl succinate  
(reaction in prepg. reagent for color **photog.**  
materials)

L25 ANSWER 13 OF 39 HCA COPYRIGHT 2003 ACS

131:122880 Developer composition for **silver halide**

color **photographic** material and development. Noguchi,  
Atsushi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
JP 11194462 A2 19990721 Heisei, 56 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1997-361249 19971226.

AB The developer compn. consists of 1 part of a concd. soln. in which  
the concn. of carbonates is in the range of 0.5-2 M, the K<sup>+</sup> to Na<sup>+</sup>  
ratio is in the range of 1-4, and the pH value is .gtoreq.12.5. A  
**Ag halide color photog.** material contg.  
a pyrrolotriazole deriv. as a **cyan coupler** is  
developed with the compn. The compn. contg. developing agents in a  
high concn. shows excellent storage stability and the deposition of  
insol. matters upon storage and coloration of the processing soln.

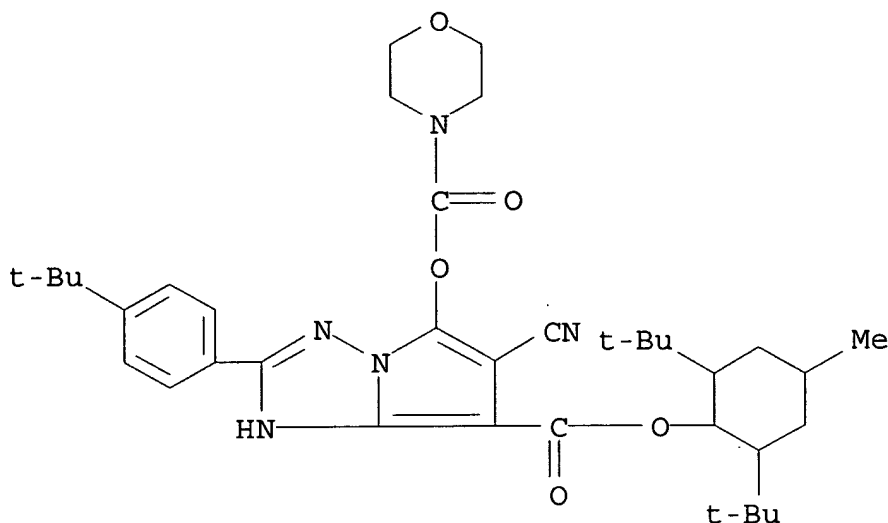
and container due to air oxidn. are prevented.

IT 188745-52-0

(development of **photog.** film contg. pyrrolotriazole deriv. as a **cyan coupler**)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-413

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photog** developer carbonate; potassium sodium content

**photog** developer; pyrrolotriazole **coupler**

**photog** film development

IT Surfactants

(anionic; carbonate, potassium, and sodium ion content-controlled **photog.** developer)

IT **Photographic** developers

(carbonate, potassium, and sodium ion content-controlled **photog.** developer)

IT **Cyan couplers**

(development of **photog.** film contg. pyrrolotriazole deriv. as a **cyan coupler**)

IT 102-71-6, uses 122-20-3, Triisopropanolamine 584-08-7, Potassium carbonate 657-84-1, Sodium p-toluenesulfonate 5080-22-8, Isopropylhydroxylamine

(carbonate, potassium, and sodium ion content-controlled **photog.** developer)

IT 188745-52-0

(development of **photog.** film contg. pyrrolotriazole deriv. as a **cyan coupler**)

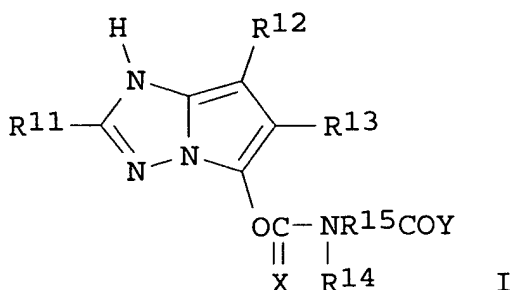
IT 118181-83-2

(surfactant; carbonate, potassium, and sodium ion content-controlled **photog.** developer)

L25 ANSWER 14 OF 39 HCA COPYRIGHT 2003 ACS

131:108839 Color **photographic** material with improved processing stability. Bergthaller, Peter (Agfa-Gevaert A.-G., Germany). Ger. Offen. DE 19801352 A1 **19990722**, 20 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1998-19801352 19980116.

GI



AB In the color **photog.** material comprising a support, at least 1 blue-sensitive, yellow **coupler**-contg. **Ag halide** emulsion layer, at least 1 green-sensitive, magenta **coupler**-contg. **Ag halide** emulsion layer, at least 1 red-sensitive, **cyan coupler**-contg. **Ag halide** emulsion layer, as well as further light-insensitive layers, the **photog.** material contains at least 1 **cyan coupler** represented by a general formula I (R11 = alkyl, aryl, acylamino, alkylcarbamoyl, arylcarbamoyl, heterocyclyl; R12 = electron acceptor group; R13 = electron acceptor group; R14 = alkyl, aryl; R15 = divalent bridge with 2-4 bridging atoms; X = O, NSO<sub>2</sub>R<sub>21</sub>; R<sub>21</sub> = ballast group; Y = splitting group). The material shows improved processing stability.

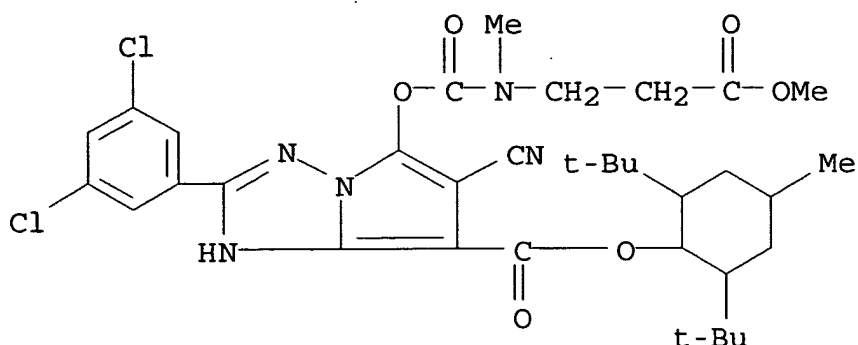
IT 231962-68-8P

(cyan coupler in color **photog.**

material with improved processing stability)

RN 231962-68-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-(3,5-dichlorophenyl)-5-[[[(3-methoxy-3-oxopropyl)methylamino]carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICA C07D487-04; C07D233-72

CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

ST color photog material cyan coupler

IT Color photographic paper

**Cyan couplers**

(color photog. material with improved processing  
stability)

IT **Photographic films**

(color; color photog. material with improved processing  
stability)

IT 231962-68-8P

(cyan coupler in color photog.  
material with improved processing stability)

IT 231962-69-9

(prepn. of cyan coupler for color  
photog. material with improved processing stability)

IT 231962-70-2P

(prepn. of cyan coupler for color  
photog. material with improved processing stability)

L25 ANSWER 15 OF 39 HCA COPYRIGHT 2003 ACS

131:80686 **Silver halide color photographic**

material containing formyl-substituted developing agent and its  
**imaging**. Makuda, Toshiyuki; Nakamura, Takashi; Nakamura,  
Takeki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
JP 11167185 A2 19990622 Heisei, 66 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1998-60742 19980312. PRIORITY: JP  
1997-265568 19970930.

AB The color photog. material having .gtoreq.3 photog

. layers on a support contains 3 Ag halide  
emulsions with different sensitivity one another, .gtoreq.3  
dye-forming couplers, and a precursor of a color developer  
OHCArXLm(PPD) (Ar = aryl, heterocyclic group; X = methylene located  
at a cleanable site by the oxidn. of the CHO group; L = linkage  
group; m = 0-3; PPD = chromogenic developer moiety). The  
**imaging** of the above material using an activator soln.

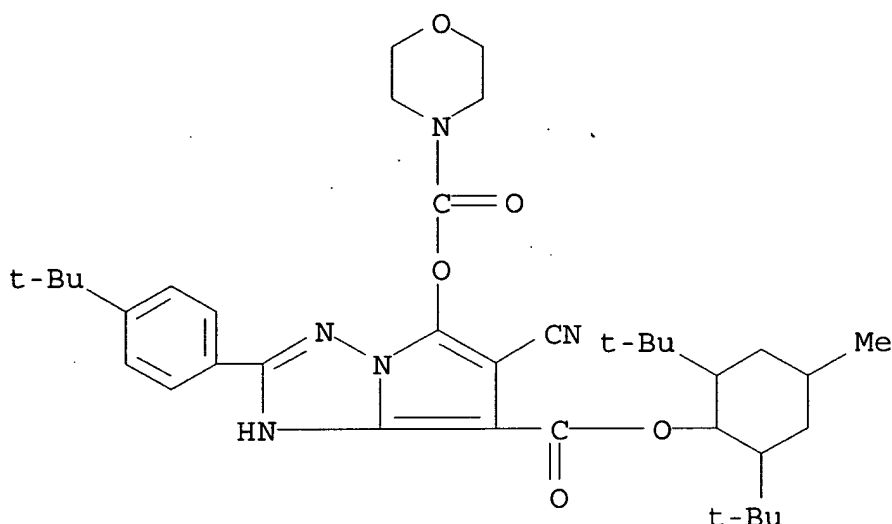
contg. a peroxide and no developing agent is also claimed. The material shows improved storage stability and gives high-contrast **images** without stain formation in the developing agent.

IT 188745-52-0

(cyan coupler; **imaging of silver halide color photog. material** contg. formyl-substituted developing agent)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-00

ICS G03C001-42; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** film development formyl developer; base precursor color developer **photog**; formyl substituted phenylenediamine color developer **photog**; activator peroxide processing color **photog** film

IT **Photographic development**

**Photographic films**

(color; **imaging of silver halide color photog. material** contg. formyl-substituted developing agent)

IT Color developers

(**imaging of silver halide color photog. material** contg. formyl-substituted developing agent)

IT 223481-90-1P

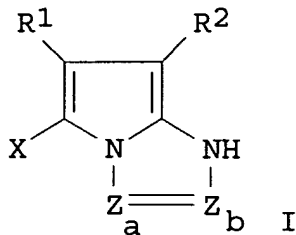
(color developer precursor; **imaging of silver halide color photog. material** contg.)

- formyl-substituted developing agent)  
IT 223481-95-6 223482-00-6 223482-04-0 229155-66-2 229155-67-3  
229155-68-4  
(color developer precursor; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 93951-12-3 117827-06-2 175873-64-0 188745-52-0  
229155-65-1  
(cyan coupler; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 223482-11-9P  
(deprotection of; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 19438-10-9, Methyl 3-hydroxybenzoate  
(formylation of; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 85888-24-0 124351-77-5 152827-98-0 168770-02-3  
(magenta coupler; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 24589-99-9P  
(protection of OH and CHO with ethylene glycol and chloromethyl Me ether; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 223482-09-5  
(reaction with benzyl alc. deriv.; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 223482-07-3P  
(reaction with nitrobenzoylamide deriv.; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 223603-24-5P  
(redn. of; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)  
IT 30744-85-5 70950-45-7 95050-16-1 229155-63-9  
(yellow coupler; **imaging of silver halide color photog.** material contg. formyl-substituted developing agent)

L25 ANSWER 16 OF 39 HCA COPYRIGHT 2003 ACS  
131:25704 Method for processing **silver halide color photographic** material containing pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan stain**. Ishikawa, Takatoshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11133562 A2 19990521  
Heisei, 64 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP

1997-292946 19971024.

GI

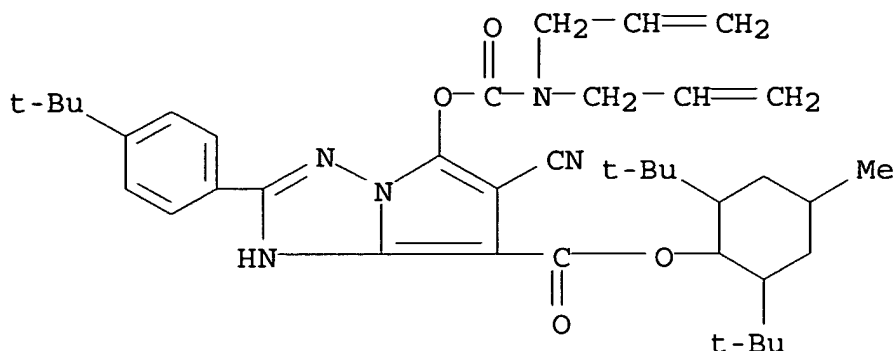


AB In the method for processing **Ag halide color photog.** material comprising imagewise exposure, chromogenic development, desilvering, and washing and/or stabilizing, the bleach-fixing soln. shows the pH 3.5-5.5, preferably contg. RSO<sub>2</sub>M (R = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, aralkyl; M = H, alkali metal, ammonium, quaternary amine), and the **photog.** material contains a pyrrolotriazole **cyan coupler** I (Z<sub>a</sub>, Z<sub>b</sub> = CR<sub>3</sub>·, N·; Z<sub>a</sub> .noteq. Z<sub>b</sub>; R<sub>1</sub>, R<sub>2</sub> = electron-withdrawing group with the Hammett's .sigma.p .gtoreq.0.20 and the sum of .sigma.p .gtoreq.0.65; R<sub>3</sub> = H, substituent; X = H, leaving group by **coupling** with the oxidized developing agent; I may take dimer or polymer) in the **cyan**-developing layer,. The **photog.** material used in the above processing may contain a pyrazolinone deriv. Though I provides a **cyan** dye with an outstanding purity, it is accompanied by **cyan** stain, which is reduced by the low pH bleach-fixing, consequently, the combination improves color **image** quality of the processed material.

IT 184947-09-9  
(**cyan coupler**; method for processing **silver halide color photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)

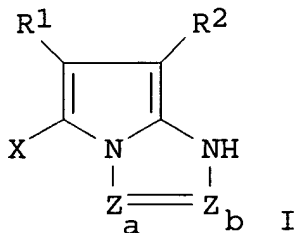
RN 184947-09-9 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)





- IC ICM G03C007-42  
ICS G03C007-384; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST processing color **photog** film developer; sulfinic acid  
bleach fixing **photog** processing; pyrroloazole **cyan**  
**coupler photog** film development; pyrrolotriazole  
**cyan coupler photog** film processing
- IT Color **photographic** processing  
(bleach-fixing, solns. for; method for processing **silver**  
**halide** color **photog.** material contg.  
pyrrolotriazole **coupler** with low pH bleach-fixing agent  
to reduce **cyan** stain)
- IT **Photographic** fixing  
**Photographic** fixing  
(color, bleach-fixing, solns. for; method for processing  
**silver halide** color **photog.** material  
contg. pyrrolotriazole **coupler** with low pH  
bleach-fixing agent to reduce **cyan** stain)
- IT **Cyan couplers**  
(method for processing **silver halide** color  
**photog.** material contg. pyrrolotriazole **coupler**  
with low pH bleach-fixing agent to reduce **cyan** stain)
- IT 1709-60-0 7472-15-3 16574-29-1 160682-82-6  
(bleach-fixing agent contg.; method for processing **silver**  
**halide** color **photog.** material contg.  
pyrrolotriazole **coupler** with low pH bleach-fixing agent  
to reduce **cyan** stain)
- IT 202483-63-4  
(color-mixing prevention agent; method for processing  
**silver halide** color **photog.** material  
contg. pyrrolotriazole **coupler** with low pH  
bleach-fixing agent to reduce **cyan** stain)
- IT 184947-09-9 188745-52-0 200049-62-3  
(**cyan coupler**; method for processing  
**silver halide** color **photog.** material  
contg. pyrrolotriazole **coupler** with low pH  
bleach-fixing agent to reduce **cyan** stain)

- IT 108-59-8, Methyl malonate  
(hexadecanation of; method for processing **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)
- IT 23130-42-9P  
(hydrolysis and dehydration of; method for processing **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)
- IT 112-82-3, 1-Bromohexadecane  
(reaction with Me succinate; method for processing **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)
- IT 53633-32-2P  
(reaction with phenylhydrazine; method for processing **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)
- IT 100-63-0, Phenylhydrazine  
(reaction with succinate deriv.; method for processing **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with low pH bleach-fixing agent to reduce **cyan** stain)
- L25 ANSWER 17 OF 39 HCA COPYRIGHT 2003 ACS  
131:25703 Processing of **silver halide** color **photographic** material containing pyrrolotriazole **coupler** with sulfinate-containing developer. Ishikawa, Takatoshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11133561 A2 19990521 Heisei, 64 pp. (Japanese).  
CODEN: JKXXAF. APPLICATION: JP 1997-298729 19971030.
- GI



- AB In the method for processing **Ag halide** color **photog.** material comprising imagewise exposure, chromogenic development, desilvering, and washing and/or stabilizing, the developer soln. contains RS<sub>2</sub>OM (R = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, aralkyl; M = H, alkali metal, ammonium, quaternary

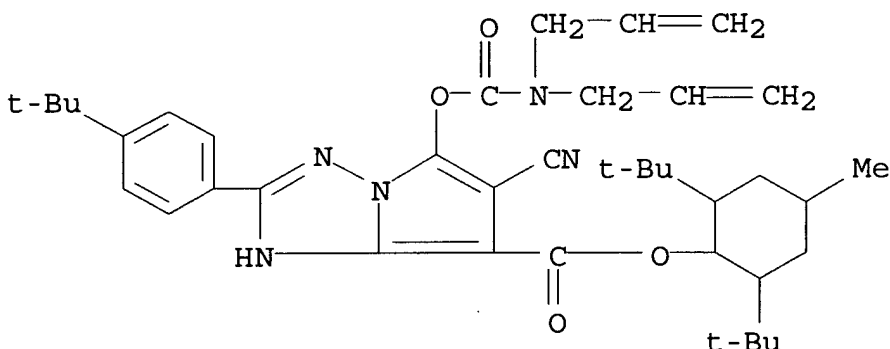
amine) and the **photog.** material contains a pyrrolotriazole **cyan coupler I** (Za, Zb = CR<sub>3</sub>:, N:; Za .noteq. Zb; R<sub>1</sub>, R<sub>2</sub> = electron-withdrawing group with the Hammett's .sigma.p .gtoreq.0.20 and the sum of .sigma.p .gtoreq.0.65; R<sub>3</sub> = H, substituent; X = H, leaving group by **coupling** with the oxidized developing agent; I may take dimer or polymer) in the **cyan-developing layer**. Though the **coupler I** gives a **cyan dye** with an outstanding purity, it is accompanied by **cyan stain**, which is reduced by the addn. of RSO<sub>2</sub>M, consequently, the combination improves color **image** quality of the processed material.

IT 184947-09-9

(**cyan coupler**; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with sulfinate-contg. developer)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-413

ICS G03C007-384

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** development **cyan coupler**; processing color developer **photog** film sulfinate; sulfinic acid additive **photog** developer; pyrroloazole **cyan coupler photog** film development; pyrrolotriazole **cyan coupler photog** film processing

IT **Photographic** development (color; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **coupler** with sulfinate-contg. developer)

IT Color developers

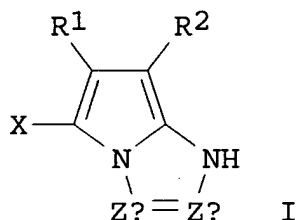
**Cyan couplers**

(processing of **silver halide** color **photog.** material contg. pyrrolotriazole **coupler**)

- with sulfinate-contg. developer)  
 IT 184947-09-9 188745-52-0 200049-62-3  
 (cyan coupler; processing of silver  
 halide color photog. material contg.  
 pyrrolotriazole coupler with sulfinate-contg.  
 developer)  
 IT 536-57-2 1709-60-0 7472-15-3 15451-00-0 60601-05-0  
 (processing of silver halide color  
 photog. material contg. pyrrolotriazole coupler  
 with sulfinate-contg. developer)

L25 ANSWER 18 OF 39 HCA COPYRIGHT 2003 ACS  
 130:359244 Processing of silver halide color  
 photographic photosensitive material. Yoshida, Kazuaki  
 (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP  
 11125885 A2 19990511 Heisei, 73 pp. (Japanese). CODEN:  
 JKXXAF. APPLICATION: JP 1997-291431 19971023.

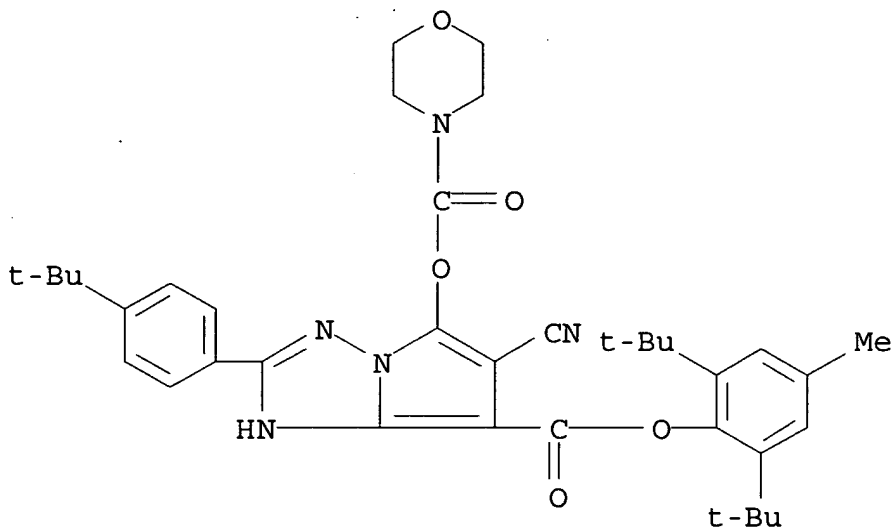
GI



- AB In processing an exposed Ag halide color  
 photog. material possessing .gtoreq.1 yellow-coloring,  
 .gtoreq.1 magenta-coloring, and .gtoreq.1 cyan-coloring  
 Ag halide emulsion layers and .gtoreq.1  
 non-coloring hydrophilic colloid layer by using an automatic  
 processor, the material contains .gtoreq.1 cyan  
 dye-forming coupler I [Za, Zb = CR<sub>3</sub>:, N:, 1 of Za and Zb  
 is N:, and the other CR; R<sub>1</sub>, R<sub>2</sub> = electron-attracting group having a  
 Hammett's substituent const. .sigma.p value of .gtoreq.0.20, the sum  
 of the .sigma.p values of R<sub>1</sub> and R<sub>2</sub> is .gtoreq.0.65; R<sub>3</sub> = H or  
 substituent; X = H or group releasing upon coupling with  
 an oxidized color developing agent, R<sub>1</sub>-3 and X may be divalent  
 groups which link to a polymer higher than dimer or polymer chain to  
 form a (co)polymer] in .gtoreq.1 of the cyan-coloring  
 emulsion layers and is processed with a color developing soln.  
 contg. .gtoreq.1 compd. R<sub>3</sub>OL<sub>1</sub>pL<sub>2</sub>qL<sub>3</sub>rH (R<sub>3</sub> = C.gioreq.6 alkyl, aryl;  
 L<sub>1</sub>, L<sub>3</sub> = ethyleneoxy; L<sub>2</sub> = glycide; p, q, r = 0-200, when q = 0, p +  
 r .gtoreq. 50 and when q .gtoreq. 1, p + q + r .gtoreq. 20). The  
 unevenness in processing at the end of prints upon color printing  
 and the blotting of cyan color upon laminating prints  
 after processing are prevented effectively.  
 IT 200111-37-1

(**photog.** film contg. pyrrolotriazole deriv.  
**cyan coupler**)

RN 200111-37-1 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl  
ester (9CI) (CA INDEX NAME)

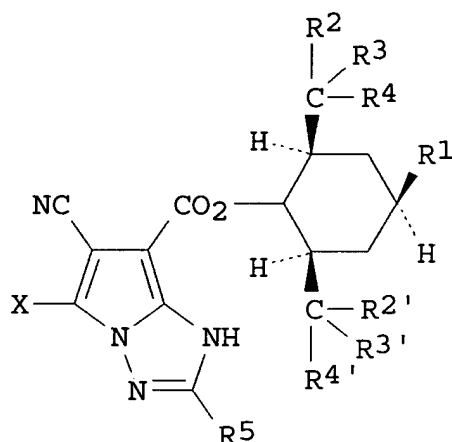


IC ICM G03C007-38  
ICS G03C007-392  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **photog cyan coupler** pyrrolotriazole  
deriv; developer **photog** nonionic surfactant  
IT Surfactants  
(nonionic; **photog.** developer contg. nonionic  
surfactant)  
IT **Photographic** developers  
(**photog.** developer contg. nonionic surfactant)  
IT **Cyan couplers**  
(**photog.** film contg. pyrrolotriazole deriv.  
**cyan coupler**)  
IT 202483-63-4P  
(color contamination-preventing agent; **photog.** film  
contg. pyrrolotriazole deriv. **cyan coupler**)  
IT 122-20-3, Triisopropanolamine 9002-92-0, Polyethylene glycol  
lauryl ether 9004-95-9, Polyethylene glycol hexadecyl ether  
26027-38-3, Polyethylene glycol p-nonylphenyl ether 37311-00-5,  
Oxirane-methyloxirane copolymer monododecyl ether 63727-44-6  
66988-47-4, Oxirane-methyloxirane copolymer mono(p-nonylphenyl)  
ether  
(**photog.** developer contg. nonionic surfactant)  
IT 200111-37-1

(photog. film contg. pyrrolotriazole deriv.  
cyan coupler)

L25 ANSWER 19 OF 39 HCA COPYRIGHT 2003 ACS  
130:359240 **Silver halide color photographic**  
material using novel **cyan coupler**. Maeda,  
Hideki; Matsuoka, Mitsuyuki; Shimata, Yasuhiro (Fuji Photo Film Co.,  
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11119391 A2  
19990430 Heisei, 32 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1997-276294 19971008.

GI



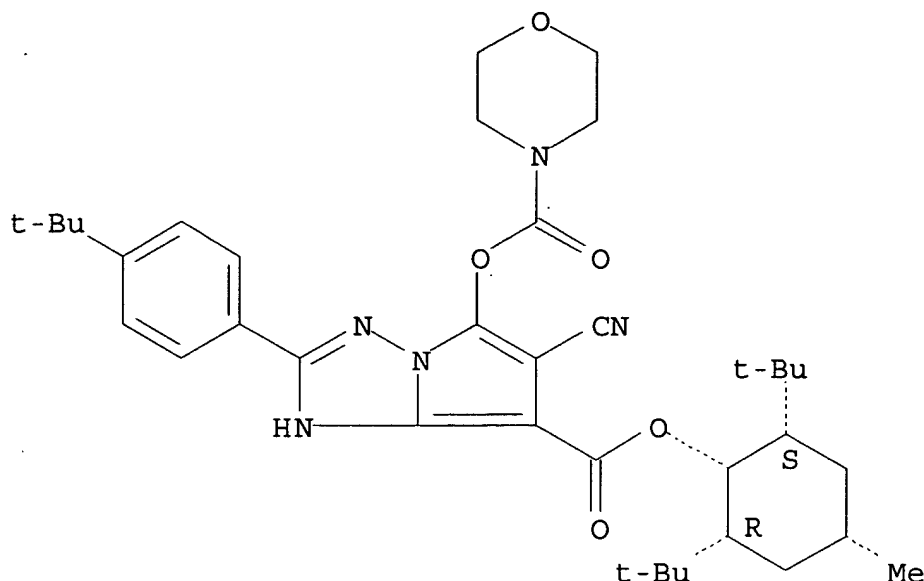
I

AB The title material contains a stereochem. pure **cyan coupler** of the formula I [R1-4, R2'-4' = H or alkyl, R2 and R3 or R2' and R3' may link to form a ring; R5 = aliph. group or aryl; X = H or group releasing upon **coupling** with an oxidized color developing agent; in the relative configuration of the chem. bonds of the substituents bonding to the cyclohexane ring, it is shown that the groups of which the bonds are indicated by the bold line present over the paper and the H atoms of which the bonds are indicated by the dot line present under the paper]. The variation of color d. in the material due to the variation of compns. in the processing solns. is little.

IT **224769-01-1P**  
(tert-alkylcyclohexanol pyrrolotriazole deriv. **photog cyan coupler**)

RN 224769-01-1 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, (1.alpha.,2.alpha.,4.alpha.,6.alpha.)-2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

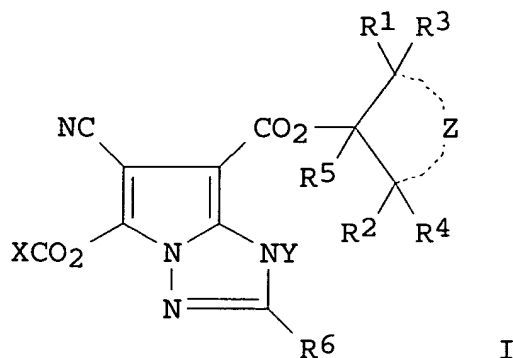
Relative stereochemistry.



- IC ICM G03C007-38  
 CC **74-2** (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 28  
 ST **photog cyan coupler** alkyl cyclohexanol  
 pyrrolotriazole  
 IT **Cyan couplers**  
 (tert-alkylcyclohexanol pyrrolotriazole deriv. **photog**  
**cyan coupler**)  
 IT 190436-30-7P 224769-07-7P 224769-08-8P  
 (prepn. of alkylcyclohexanol pyrrolotriazole deriv.  
**photog cyan coupler**)  
 IT 302-01-2, Hydrazine, reactions 6148-64-7 15159-40-7,  
 4-Morpholinecarbonyl chloride 166522-39-0 194419-32-4  
 (prepn. of alkylcyclohexanol pyrrolotriazole deriv.  
**photog cyan coupler**)  
 IT 23790-39-8, 2,6-Di-tert-butyl-4-methylcyclohexanone  
 (redn. of; prepn. of alkylcyclohexanol pyrrolotriazole deriv.  
**photog cyan coupler**)  
 IT 224769-02-2 224769-03-3 224769-05-5 224769-06-6  
 (tert-alkylcyclohexanol pyrrolotriazole deriv. **photog**  
**cyan coupler**)  
 IT 224769-01-1P 224769-04-4P  
 (tert-alkylcyclohexanol pyrrolotriazole deriv. **photog**  
**cyan coupler**)

**image** formation. Yokozawa, Akihito (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11109578 A2 19990423 Heisei, 39 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-282822 19970930.

GI



AB The **Ag halide photog.** material comprises a support having thereon .gtoreq.1 yellow, magenta, or **cyan coupler**-contg. emulsion layer, in which the **cyan coupler**-contg. emulsion layer contains a pyrroloazole-type **cyan coupler** I (R1, R2 = alkyl, aryl; R3, R4, R5 = H, alkyl, aryl; Z = non-metallic atoms required to form a satd. ring; R6 = substituent; X = heterocycle, substituted amino, aryl; Y = H, releasing group in color development), **Ag halide** tabular grains with av. aspect ratio .gtoreq.3 contg. .gtoreq.95 mol% **AgCl** assocd. with 0.1-5.0 mol% (vs. Ag) **AgBr** and/or 0.1-2.0 mol% (vs. Ag) **AgI** on the surface of the .ltoreq.20 vol.% of the grains. An **image** is formed by scanning exposure and color development of the obtained **Ag halide** material. The material shows improved rapid processability, processing stability before and after running processing, and color reprodn.

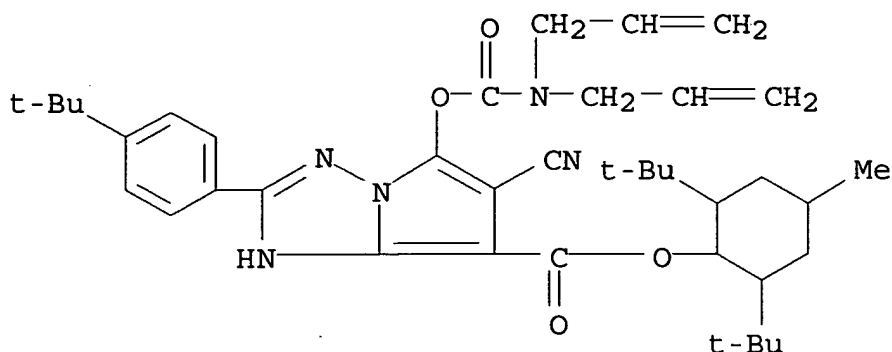
IT 184947-09-9

(pyrroloazole-type **cyan coupler** for rapid processing with improved color reprodn.)

RN 184947-09-9 HCA

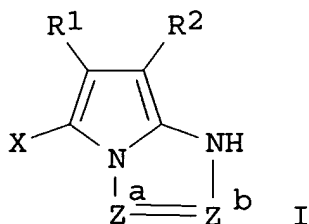
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)





IC ICM G03C007-38  
ICS G03C001-035; G03C007-407  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST cyan coupler pyrroloazole photog  
material  
IT Cyan couplers  
(pyrroloazole-type cyan coupler for rapid  
processing with improved color reprodn.)  
IT 178743-91-4 179330-29-1 184947-09-9 188745-52-0  
(pyrroloazole-type cyan coupler for rapid  
processing with improved color reprodn.)

L25 ANSWER 21 OF 39 HCA COPYRIGHT 2003 ACS  
130:330536 **Silver halide color photographic**  
material containing pyrrolotriazole **cyan coupler**  
and hydroxyurea to improve color reproduction and its processing.  
Otani, Shigeaki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai  
Tokkyo Koho JP 11109576 A2 **19990423** Heisei, 67 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-282821 19970930.



AB The photog. material has a cyan coupler  
-contg. Ag halide photog. emulsion  
layer contg. Ag(Br,Cl,I), Ag(Br,Cl), or AgCl with  
AgCl content .gtoreq.95 mol% and a pyrroloazole  
coupler I (Za, Zb = CR<sub>3</sub>., N:; Za .noteq. Zb; R<sub>1</sub>, R<sub>2</sub> =

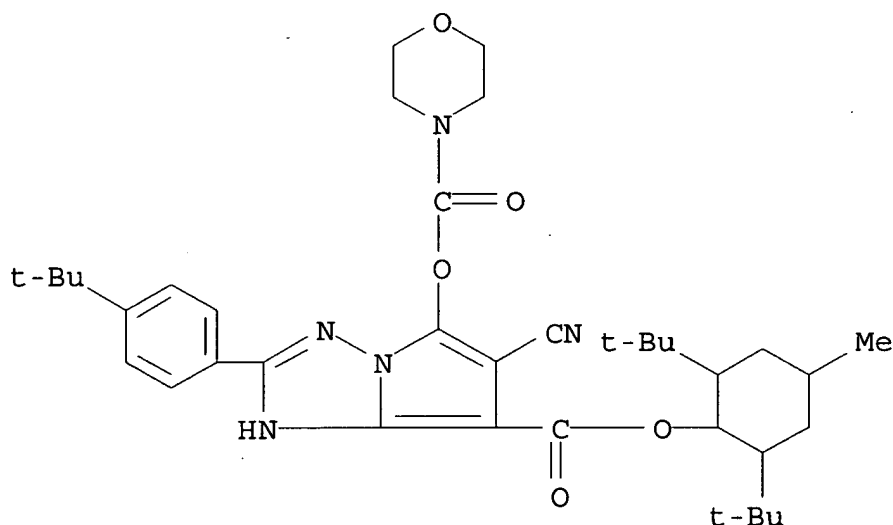
electron-withdrawing group with the Hammett's  $\sigma_p$   $\geq 0.20$  and the sum of  $\sigma_p$  in R1 and R2  $\geq 0.65$ ; R3 = H, substituent; X = H, leaving group to be released by the coupling reaction with an oxide of a developing agent) and contains a R21R22NCONR23OH (R21-23 = H, alkyl, aryl). A color image is formed by scanning exposure of the above photog. material with a modulated light beam with the scanning pitch narrower than its effective beam diam. and the overlapping width between rasters 5-95%, followed by development. The material gives color images with good color reprodn., light fastness, and pressure resistance.

IT 188745-52-0

(coupler; processing of silver halide color photog. material contg. pyrrolotriazole cyan coupler and hydroxyurea to improve color reprodn.)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-34

ICS G03C001-035; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler color photog film; pyrrolotriazole cyan coupler color photog film; hydroxyurea additive cyan coupler color photog

IT Photographic emulsions

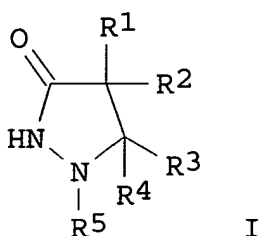
Photographic films

(color; silver halide color photog.

- material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT Color **photographic** processing  
(scanning exposure; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT **Cyan couplers**  
(**silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 178743-91-4 179330-29-1 **188745-52-0** 200110-90-3  
(**coupler**; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 23130-42-9P  
(demethylation and redn. of; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 106-65-0, Methyl succinate  
(hexadecanation of; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 7335-35-5 7433-46-7 26817-00-5 28875-12-9 52253-30-2  
118410-88-1 220323-18-2  
(processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 202483-63-4P  
(processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 100-63-0, Phenyl hydrazine  
(processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 112-82-3, 1-Bromohexadecane  
(reaction with Me succinate; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)
- IT 53633-32-2P  
(reaction with Ph hydrazine; processing of **silver halide** color **photog.** material contg. pyrrolotriazole **cyan coupler** and hydroxyurea to improve color reprodn.)

material containing 3-pyrazolidone derivative and **cyan coupler** with low pKa to improve developability. Yoshioka, Yasuhiro; Soejima, Susumu; Takahashi, Osamu; Saito, Naoki; Mikoshiba, Takashi; Morigaki, Masakazu (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11030843 A2 19990202 Heisei, 63 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-197992 19970709.

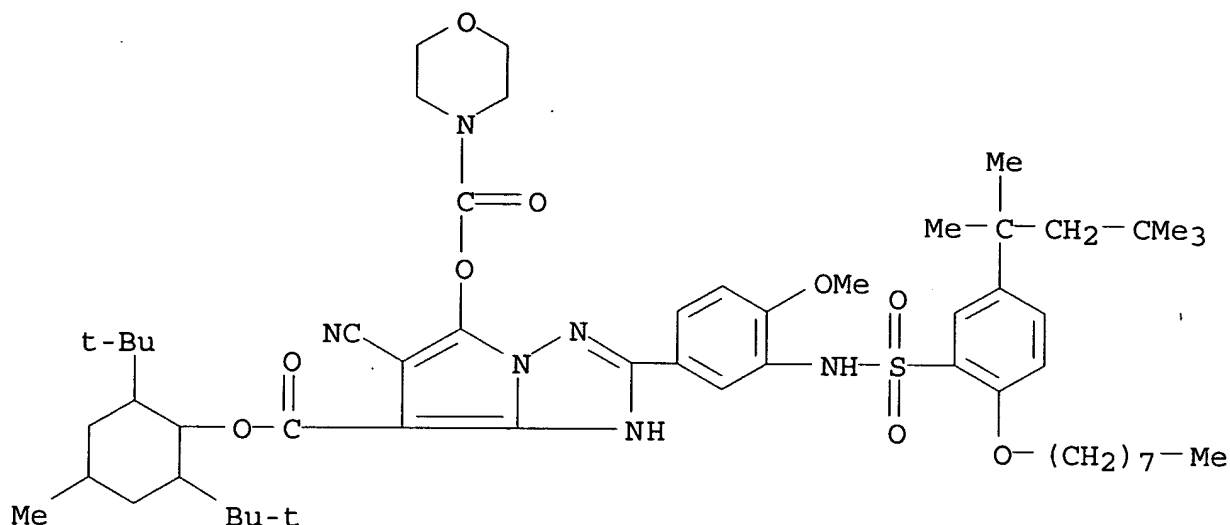
GI



AB The **photog.** material has .gtoreq.1 **cyan dye-developing layer** contg. a **cyan coupler** with the pKa .ltoreq.8.7, and .gtoreq.1 hydrophilic colloid layer contg. a 3-pyrazolidone deriv. I (R1, R2 = H, alkyl, aryl; R3, R4 = H, alkyl, aryl; R5 = aryl; sum of C atoms in R1-R5 >13). Preferable **cyan coupler** is pyrrolotriazole derivs. The combination of the **coupler** and 3-pyrazolidone improves rapid developability and dye developability to keep a consistent processing quality.

IT 200216-40-6  
(**cyan coupler; silver halide color photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)

RN 200216-40-6 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-methoxy-3-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-392  
ICS G03C007-34
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST color **photog** film **cyan coupler**  
pyrroloazole; pyrazolidone additive color **photog** film;  
pyrrolotriazole **cyan coupler** color  
**photog** film; developer incorporated color **photog**  
film
- IT **Photographic films**  
(color; **silver halide** color **photog.**  
material contg. 3-pyrazolidone deriv. and **cyan**  
**coupler** with low pKa to improve developability)
- IT **Cyan couplers**  
(**silver halide** color **photog.**  
material contg. 3-pyrazolidone deriv. and **cyan**  
**coupler** with low pKa to improve developability)
- IT 190436-30-7P  
(bromination of; **silver halide** color  
**photog.** material contg. 3-pyrazolidone deriv. and  
**cyan coupler** with low pKa to improve  
developability)
- IT 160028-18-2 178743-91-4 179330-29-1 187472-73-7  
200216-40-6 220322-87-2 220322-91-8  
(**cyan coupler**; **silver**  
**halide** color **photog.** material contg.  
3-pyrazolidone deriv. and **cyan coupler** with  
low pKa to improve developability)
- IT 184947-09-9P 188745-52-0P  
(**cyan coupler**; **silver**  
**halide** color **photog.** material contg.  
3-pyrazolidone deriv. and **cyan coupler** with

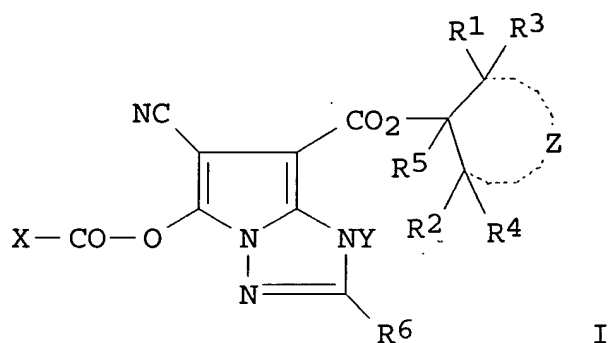
- low pKa to improve developability)
- IT 194419-31-3P  
(cyclization and acylation of; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 53633-31-1P  
(dehydration of; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(esterification of; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 106-65-0  
(hexadecanation of; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 23130-42-9P 200049-66-7P  
(hydrolysis of; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 112-82-3, 1-Bromohexadecane  
(reaction with Me succinate; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 53633-32-2  
(reaction with phenylhydrazine; **silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 80336-04-5 118410-88-1 211051-31-9 211051-97-7 211052-03-8  
211052-07-2 211052-11-8 220323-11-5 220323-13-7 220323-16-0  
220323-18-2 220323-19-3 220323-20-6  
(**silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 202483-63-4P  
(**silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 194419-30-2P  
(**silver halide** color **photog.** material contg. 3-pyrazolidone deriv. and **cyan coupler** with low pKa to improve developability)
- IT 100-63-0, Phenylhydrazine 105-34-0, Methyl cyanoacetate  
15159-40-7, 4-Morpholinecarbonyl chloride

(silver halide color photog.  
material contg. 3-pyrazolidone deriv. and cyan  
coupler with low pKa to improve developability)

L25 ANSWER 23 OF 39 HCA COPYRIGHT 2003 ACS

130:160604 Color **photographic** film containing nondiffusible  
colorless carboxylic acid and showing good pressure resistance.  
Yokosawa, Akihito (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai  
Tokkyo Koho JP 11007109 A2 19990112 Heisei, 52 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-175160 19970617.

GI



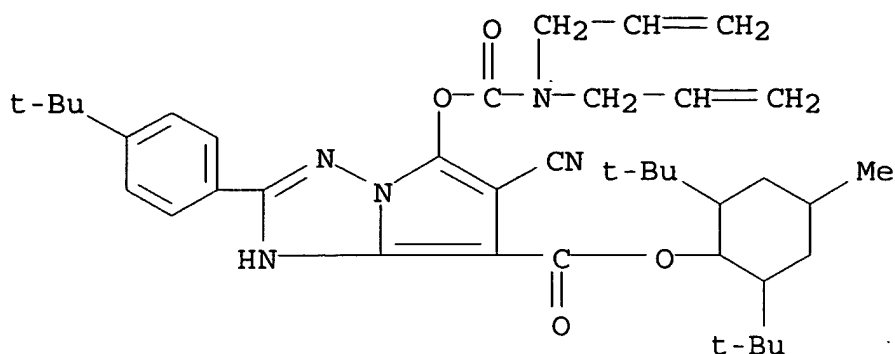
AB The material comprises a reflective support laminated with a  
waterproof resins from both sides, an emulsion layer contg.  
.gtoreq.95 mol% (based on the total **Ag halide**)  
**AgCl** and contg. a Group VIII metal, and a hydrophilic  
colloid layer contg. a pyrroloazole **cyan coupler**  
I (R1, R2 = alkyl, aryl; R3-5 = H, alkyl, aryl; R6 = substituent; X  
= heterocycle, amino, aryl; Z = metal-free ring; Y = H, group  
leaving upon reaction with an oxidized developer) and a  
nondiffusible nonchromogenic colorless carboxylic acid (salt). The  
support has a lamination layer contg. .gtoreq.18 wt.% (based on the  
waterproof resin) white pigment on the emulsion side. The material  
shows rapid developability and provides sharp **images** with  
good color reprodn.

IT 184947-09-9P

(cyan coupler; pressure-resistant color  
**photog.** film contg. nondiffusible colorless carboxylic  
acid)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[[(di-2-  
propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C001-035; G03C001-09; G03C001-91; G03C007-00; G03C007-392
- CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST pyrroloazole **cyan coupler photog** film;  
iron iridium contg **photog** emulsion sensitivity;  
nondiffusible nonchromogenic colorless carboxylic acid  
**photog**; sharpness **photog** film **silver**  
**chloride** content; titania white waterproof coating  
**photog** support
- IT **Photographic emulsions**  
**Photographic films**  
(color; pressure-resistant color **photog.** film contg.  
nondiffusible colorless carboxylic acid)
- IT **Cyan couplers**  
(pressure-resistant color **photog.** film contg.  
nondiffusible colorless carboxylic acid)
- IT Group VIII elements  
(sensitizer; pressure-resistant color **photog.** film  
contg. nondiffusible colorless carboxylic acid)
- IT Coating materials  
(water-resistant, white, on **photog.** support;  
pressure-resistant color **photog.** film contg.  
nondiffusible colorless carboxylic acid)
- IT Pigments, nonbiological  
(white; pressure-resistant color **photog.** film contg.  
nondiffusible colorless carboxylic acid)
- IT 184947-09-9P 188745-52-0P  
(**cyan coupler**; pressure-resistant color  
**photog.** film contg. nondiffusible colorless carboxylic  
acid)
- IT 178743-91-4 179330-29-1  
(**cyan coupler**; pressure-resistant color  
**photog.** film contg. nondiffusible colorless carboxylic  
acid)
- IT 7439-88-5, Iridium, uses 7439-89-6, Iron, uses 7440-18-8,  
Ruthenium, uses  
(emulsion sensitizer; pressure-resistant color **photog.**  
film contg. nondiffusible colorless carboxylic acid)



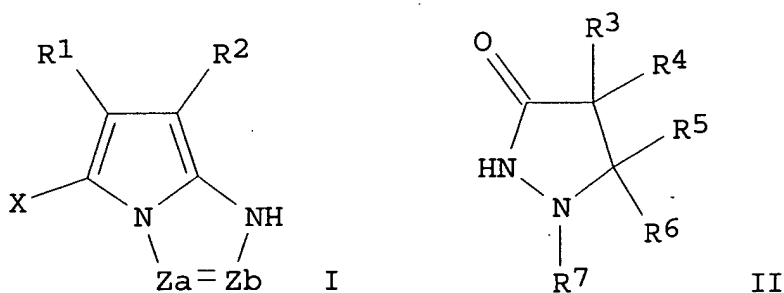
- IT 190436-30-7P 194419-30-2P 219952-45-1P 219952-46-2P  
(in prepn. of nondiffusible colorless carboxylic acid for color  
**photog.** film with good color reprodn.)
- IT 105-34-0, Methyl cyanoacetate 7726-95-6, Bromine, reactions  
15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2,  
Diallylcarbamoyl chloride 163119-16-2, 2,6-Di-tert-butyl-4-  
methylcyclohexanol 194419-32-4  
(in prepn. of nondiffusible colorless carboxylic acid for color  
**photog.** film with good color reprodn.)
- IT 112-80-1, Oleic acid, uses 5377-19-5 50772-35-5 212118-88-2  
220202-49-3  
(nondiffusible compd.; pressure-resistant color **photog.**  
film contg. nondiffusible colorless carboxylic acid)
- IT 13463-67-7, Titania, uses  
(pigment in lamination layer; pressure-resistant color  
**photog.** film contg. nondiffusible colorless carboxylic  
acid)
- IT 9002-88-4  
(support lamination layer; pressure-resistant color  
**photog.** film contg. nondiffusible colorless carboxylic  
acid)

L25 ANSWER 24 OF 39 HCA COPYRIGHT 2003 ACS

130:146176 **Silver halide photographic**

material containing transition metal complex and pyrazolidone to  
reduce pressure effect. Nakadaira, Shinichi (Fuji Photo Film Co.,  
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11007110 A2  
19990112 Heisei, 61 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1997-175161 19970617.

GI



- AB The **photog.** material has .gtoreq.1 hydrophilic colloid  
layer contg. (A) **Ag halide** particles (  
**AgCl** content .gtoreq.90 mol%) including complex(es) of Fe,  
Ru, Re, Os, and/or Ir, (B) a pyrroazole **cyan**  
**coupler** I (Za, Zb = CR<sub>3</sub>., N.; R<sub>3</sub> = H, substituent; Za  
.noteq. Zb; R<sub>1</sub>, R<sub>2</sub> = electron-withdrawing group showing the  
Hammett's .sigma.p .gtoreq.0.20 where the sum of .sigma.p for R<sub>1</sub> and  
R<sub>2</sub> .gtoreq.0.65; X = H, leaving group by **coupling** reaction

with oxidized color developer), and (C) a pyrazolidone deriv. II (R3, R4 = H, aryl, C1-30 alkyl; R5, R6 = H, alkyl, aryl; R7 = aryl). It shows good develop ability and color reprodn. quality, and is resistant to pressure effect, consequently it is suitably used as multilayer color papers.

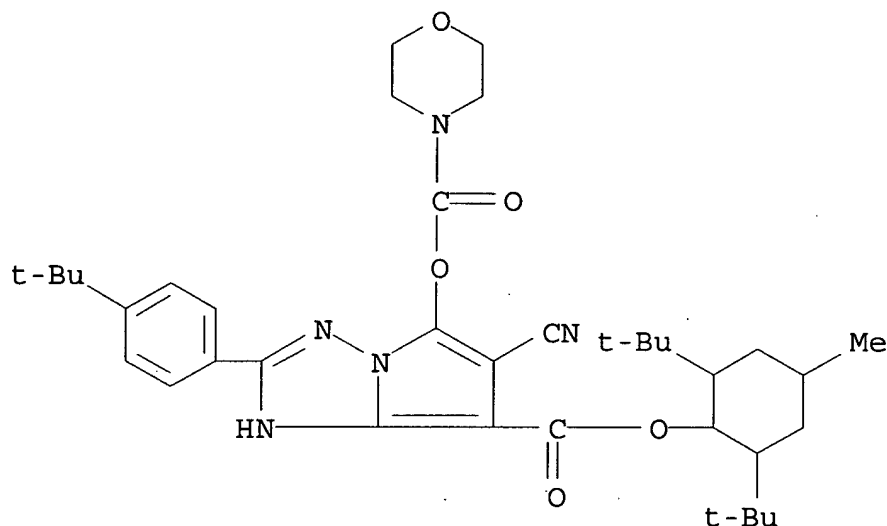
IT 188745-52-0

(cyan coupler; color photog.

material contg. transition metal complex and pyrazolidone to reduce pressure effect)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICS G03C001-035; G03C001-09; G03C007-00; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog film multilayer pressure resistance; pyrroazole cyan coupler photog film; pyrrotriazole cyan coupler photog material; condensed pyrrole coupler photog material

IT Cyan couplers

(color photog. material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT Photographic films

(color; color photog. material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT 13746-66-2, Tripotassium hexacyanoferrate 15002-31-0, Tetrapotassium hexacyanoruthenate 16920-56-2, Dipotassium hexachloroiridate 20740-36-7, Tetrapotassium hexacyanoosmate

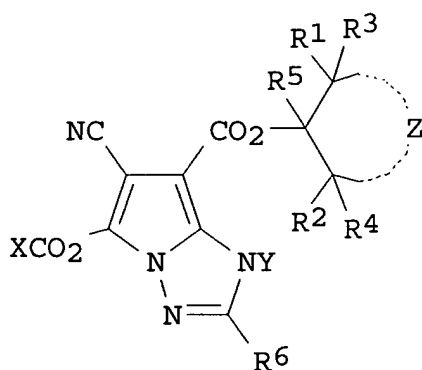
20792-41-0, Tripotassium hexacyanoiridate 25443-63-4, Tripotassium hexachlororuthenate(3-) 202483-63-4 211051-96-6 220009-78-9  
(color **photog.** material contg. transition metal complex and pyrazolidone to reduce pressure effect)

IT 188745-52-0 200137-20-8  
(cyan coupler; color **photog.** material contg. transition metal complex and pyrazolidone to reduce pressure effect)

L25 ANSWER 25 OF 39 HCA COPYRIGHT 2003 ACS

130:73773 **Silver halide color photographic** material. Saito, Naoki; Mikoshiba, Hisashi; Morigaki, Masakazu; Soejima, Shin; Yoshioka, Yasuhiro; Takahashi, Osamu (Fuji Photo Film Co., Ltd., Japan). Eur. Pat. Appl. EP 883024 A1 19981209, 93 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1998-109978 19980602. PRIORITY: JP 1997-144168 19970602.

GI



AB A **silver halide color photog.** material comprises a support having provided thereon at least one hydrophilic colloid layer, wherein the **silver halide color photog.** material contains a **coupler** represented by the formula I wherein R1 and R2 each represents an alkyl group or an aryl group; R3, R4 and R5 each represents a hydrogen atom, an alkyl group or an aryl group; Z represents a nonmetallic at. group necessary to form a satd. ring; R6 represents a substituent; X represents a heterocyclic group, a substituted amino group or an aryl group and Y represents a hydrogen atom or a group capable of being released upon color development and a non-color-forming colorless cyclic imide compd. having a diffusion-resistant group. The **silver halide color photog.** material has an excellent color-forming property to provide a color

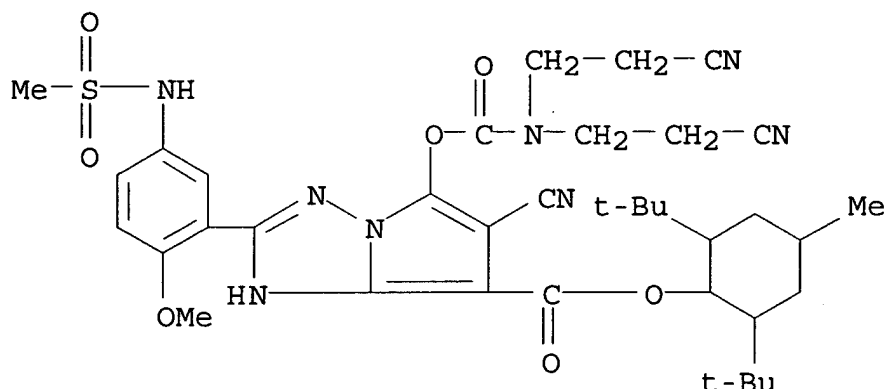
**image** of high max. color d. and good color reproducibility.

IT 178743-95-8

(cyan photog. coupler to be used in combination with cyclic imide compds. having diffusion-resistant groups in color photog. emulsions)

RN 178743-95-8 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 5-[[[bis(2-cyanoethyl)amino]carbonyl]oxy]-6-cyano-2-[2-methoxy-5-[(methylsulfonyl)amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-388

ICS G03C007-38; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog emulsion colorless cyclic imide; pyrrolotriazole cyan coupler color photog emulsion

IT Photographic emulsions

(color; contg. pyrrolotriazole color formers and cyclic imide compds. having diffusion-resistant groups)

IT Cyan couplers

(pyrrolotriazoles for use in combination with cyclic imide compds. having diffusion-resistant groups)

IT 41608-33-7, 2-Tetradecyloxybenzoic acid 77514-47-7 217456-52-5  
217456-53-6 217456-54-7 217456-55-8 217456-56-9 217456-57-0  
(color photog. emulsions contg. pyrrolotriazole cyan couplers and)

IT 178743-95-8 178743-96-9 183744-82-3

200049-62-3 200049-63-4 200110-89-0

(cyan photog. coupler to be used in combination with cyclic imide compds. having diffusion-resistant groups in color photog. emulsions)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(prepn. and reaction in prepg. cyan photog. coupler)

IT 188745-52-0P 217456-51-4P

(prepn. and use as cyan photog.

**coupler** to be used in combination with cyclic imide compds. having diffusion-resistant groups in color **photog** . emulsions)

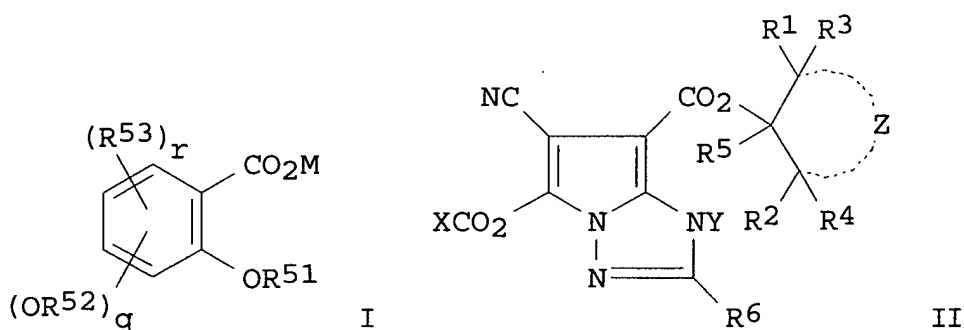
- IT 5377-19-5P, 2-Hexadecyloxybenzoic acid 88249-84-7P 112900-90-0P  
158574-65-3P  
(prepn. and use in color **photog.** emulsions contg. pyrrolotriazole **cyan couplers**)
- IT 15159-40-7, 4-Morpholinecarbonyl chloride 25761-72-2,  
Diallylcarbamoyle chloride 163119-16-2 194419-32-4  
(reaction in prep. **cyan photog. coupler**)
- IT 184947-09-9  
(reaction in prep. **cyan photog. coupler**)

L25 ANSWER 26 OF 39 HCA COPYRIGHT 2003 ACS

129:209275 **Silver halide color photographic**

material containing pyrrolotriazole derivative **cyan coupler** and carboxylic acid compound. Saito, Naoki; Morigaki, Masakazu; Yoshioka, Yasuhiro; Soejima, Susumu; Takahashi, Osamu; Mikoshiba, Takashi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10221825 A2 19980821 Heisei, 74 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-23021 19970205.

GI



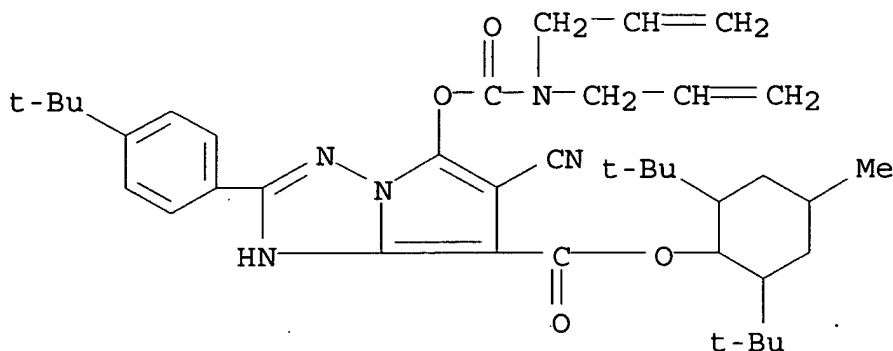
- AB The material contains a nondiffusive non-coloring colorless compd. I [R51-52 = (substituted) alkyl, aryl, acyl, carbamoyl, alkoxy carbonyl; R53 = halo, (substituted) alkyl, aryl, acyl, carbamoyl, alkoxy carbonyl, sulfonyl, sulfamoyl,; M = H, metal atom, ammonium; q = 0-2; r = 0-4; p + r .ltoreq.4; .gtoreq.1 of R51-53 = C8-22 nondiffusive group] or its salt in a hydrophilic colloid layer. The material contains a nondiffusive non-coloring colorless compd. or its salt and a **coupler** II [R1-2 = alkyl, aryl; R3-5 = H, alkyl, aryl, Z = nonmetal atoms to form satd. ring; R6 = substituent; X = heterocycle, (substituted) amino, aryl; Y = H, a releasing group by developing process] in the same or different hydrophilic colloid layer(s). The material shows good coloring property and color reprodn.

IT 184947-09-9P

(**photog.** film contg. nondiffusive carboxylic acid  
compd. and pyrrolotriazole deriv. **cyan coupler**  
)

RN 184947-09-9 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[[di-2-  
propenylamino)carbonyl]oxy]-, 2,6-bis(1,1-dimethylethyl)-4-  
methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-388

ICS G03C007-00; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

ST **photog** nondiffusive carboxylic acid compd; pyrrolotriazole  
**cyan coupler photog** film

IT **Cyan couplers****Photographic films**

(**photog.** film contg. nondiffusive carboxylic acid  
compd. and pyrrolotriazole deriv. **cyan coupler**  
)

IT 51834-16-3P, Monohexadecyl phthalate 212118-88-2P

(**photog.** film contg. nondiffusive carboxylic acid  
compd. and pyrrolotriazole deriv. **cyan coupler**  
)

IT 57-10-3, Hexadecanoic acid, uses 2027-47-6, 9-Octadecenoic acid

2312-15-4 17181-26-9, Monooctadecyl phthalate 22890-21-7

36753-13-6 50772-35-5 54680-48-7 109591-76-6 212118-85-9

212118-86-0 212118-87-1 212118-89-3 212118-90-6 212118-91-7

212118-92-8

(**photog.** film contg. nondiffusive carboxylic acid  
compd. and pyrrolotriazole deriv. **cyan coupler**  
)

IT 184947-09-9P 188745-52-0P

(**photog.** film contg. nondiffusive carboxylic acid  
compd. and pyrrolotriazole deriv. **cyan coupler**  
)

IT 178743-95-8 178743-96-9 179330-29-1

200049-63-4 200110-89-0 200216-40-6

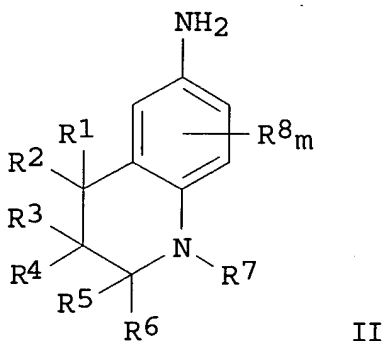
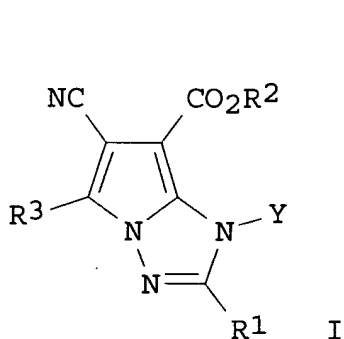
(**photog.** film contg. nondiffusive carboxylic acid compd. and pyrrolotriazole deriv. **cyan coupler**)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(prepn. of pyrrolotriazole deriv. **photog. cyan coupler**)

IT 372-09-8, Cyanoacetic acid 25761-72-2, Diallylcarbamoyle chloride  
163119-16-2, 2,6-Di-tert-butyl-4-methylcyclohexanol 194419-32-4  
(prepn. of pyrrolotriazole deriv. **photog. cyan coupler**)

L25 ANSWER 27 OF 39 HCA COPYRIGHT 2003 ACS  
128:250641 Color **image** formation using **silver halide color photographic** photosensitive materials. Kimura, Keizo; Hirano, Shigeo; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10062926 A2 19980306 Heisei, 69 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1996-218903 19960820.

GI

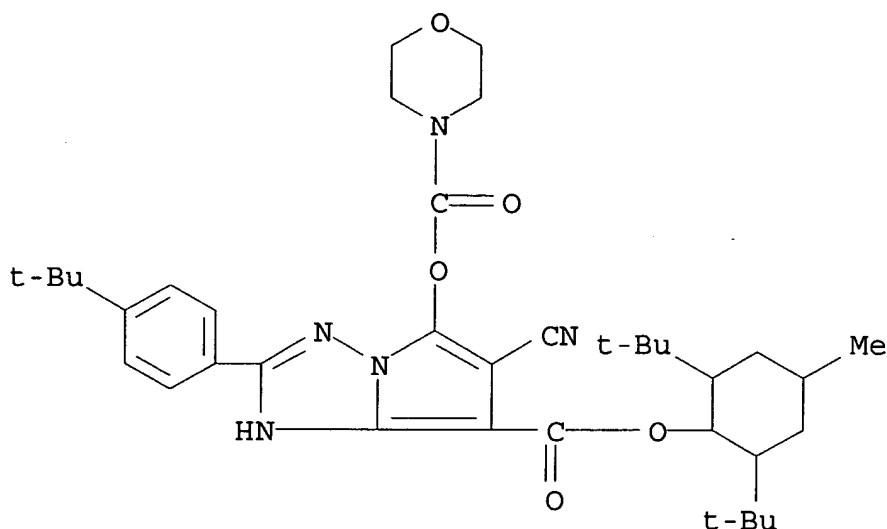


AB The title materials, comprising a support coated with .gtoreq.1 **Ag halide** emulsion layer contg. .gtoreq.1 **cyan coupler I** [R1 = substituent; R2 = aliph. group; R3 = H or XCO2 (X = heterocycle, substituted amino, aryl); Y = H or substituent], are color-developed in the presence of .gtoreq.1 p-phenylenediamine-type color developing agent of the formula II [R1-6 = H or substituent, in .gtoreq.1 of the groups R1 and R2, R3 and R4, and R5 and R6 the both are substituents; R7 = alkyl, aryl, heterocycle; R8 = substituent; n = 0-3] to form color **images**. High color quality **images** with good lightfastness and thermal resistance and without residual color stain are obtained.

IT 188745-52-0P  
(**coupler**; color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)

RN 188745-52-0 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38  
ICS G03C007-00; G03C007-413

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver halide photog color cyan coupler**; condensed polycyclic heterocycle **cyan coupler**; phenylenediamine developer **cyan coupler photog emulsion**; lightfastness color **photog cyan coupler**; heat fastness color **photog cyan coupler**

IT **Cyan couplers**  
Heat-resistant materials  
Light-resistant materials  
**Photographic developers**  
(color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)

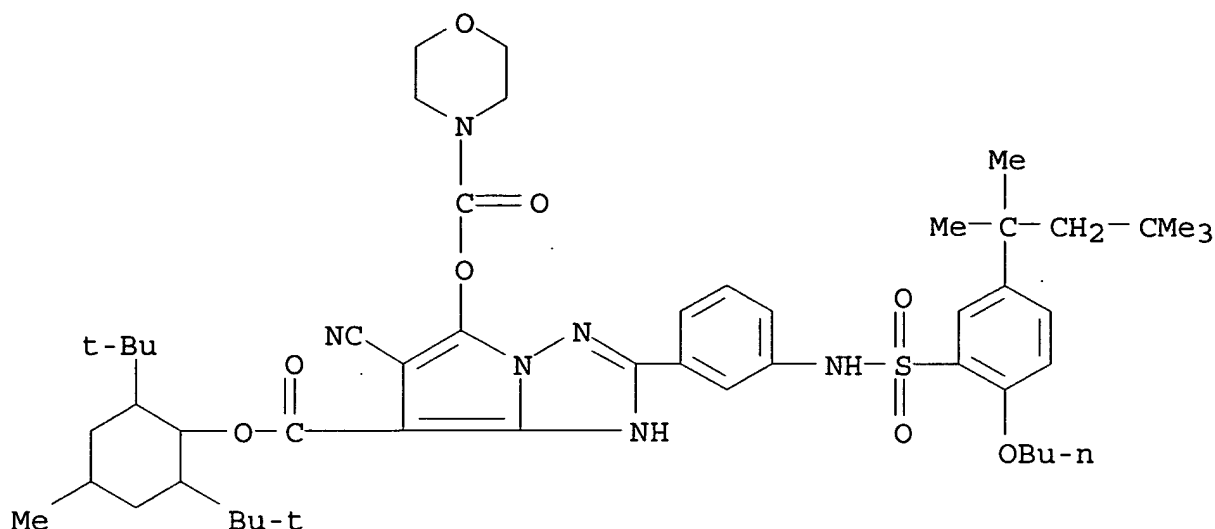
IT 15159-40-7, Morpholinocarbonyl chloride 163119-16-2,  
2,6-Di(tert-butyl)-4-methylcyclohexanol 194419-32-4  
(color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** from)

IT 188745-52-0P  
(**coupler**; color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)

IT 194419-26-6 194419-27-7 204757-08-4  
204757-09-5 204757-10-8



- (coupler; color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)
- IT 171662-44-5 171662-48-9 171662-53-6 200346-13-0 200346-16-3  
204757-11-9 204757-12-0  
(developer; color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** and p-phenylenediamine developer)
- IT 190436-30-7P 194419-30-2P 194419-31-3P  
(intermediates; color **photog.** emulsion contg. condensed polycyclic heterocycle **cyan coupler** from)
- L25 ANSWER 28 OF 39 HCA COPYRIGHT 2003 ACS  
128:186456 **Silver halide color photographic** material containing **AgCl**-dominant tabular grains. Kobayashi, Hidetoshi; Shimada, Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10020431 A2 **19980123** Heisei, 78 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-188083 19960701.
- AB Claimed color **photog.** material has .gtoreq.1 red-sensitive **Ag halide** emulsion layers contg. (1) chloride-dominant tabular grains (aspect ratio 2-25, and the **AgCl** content 60-100 mol%) in the amt. of .gtoreq.50% of total grain-projected areas and (2) a 2-equiv. **coupler(s)** in the amt. of 70-100 mol% of total **cyan couplers**. The tabular grains preferably comprises the surfaces of (100) major planes. The material has a good balance of the 3 color gradations, and the balance is insensitive to pH variation of the developer soln. Thus, a multilayer color neg. film was prepd. utilizing (1) **AgCl** emulsions for light-sensitive layers including the 2 red-sensitive layers, and (2) 2-ethoxycarbonyl-3-phenyl-5-chloro-6-cyano-7-(2,6-di-tert-butyl-4-methyl-cyclohexyloxycarbonyl)-pyrrolo[1,2d]imidazole for both of the 2 red-sensitive layers as the sole **cyan coupler**.
- IT 203067-28-1  
(coupler; color **photog.** material contg. **AgCl**-dominant tabular grains and two-equiv. **cyan coupler** to improve color balance)
- RN 203067-28-1 HCA  
CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[3-[[[2-butoxy-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-6-cyano-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C001-035  
ICS G03C001-035; G03C007-00; G03C007-34
- CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST **silver chloride** color **photog** material;  
**cyan coupler** two equiv pyrroloazole
- IT **Photographic** emulsions  
(color **photog.** material contg. **AgCl**-dominant  
tabular grains and two-equiv. **cyan coupler** to  
improve color balance)
- IT **Photographic** films  
(color; color **photog.** material contg. **AgCl**  
-dominant tabular grains and two-equiv. **cyan**  
**coupler** to improve color balance)
- IT **Cyan couplers**  
(two-equiv.; color **photog.** material contg. **AgCl**  
-dominant tabular grains and two-equiv. **cyan**  
**coupler** to improve color balance)
- IT 82684-62-6 102604-67-1 103576-31-4 111130-66-6 119142-30-2  
130840-29-8 156262-24-7 158546-46-4 158546-48-6 158546-50-0  
158546-52-2 160028-18-2 187967-19-7 187967-22-2 187967-26-6  
187967-27-7 188530-24-7 203067-26-9 203067-27-0  
**203067-28-1 203067-29-2 203067-31-6**  
203067-32-7 203067-33-8 203067-34-9 203067-35-0 203067-36-1  
203067-37-2 203254-40-4 203254-41-5  
(**coupler**; color **photog.** material contg.  
**AgCl**-dominant tabular grains and two-equiv. **cyan**  
**coupler** to improve color balance)
- IT 156233-84-0P 203067-30-5P  
(**coupler**; color **photog.** material contg.  
**AgCl**-dominant tabular grains and two-equiv: **cyan**  
**coupler** to improve color balance)

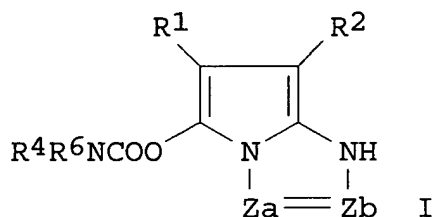
IT 920-37-6 2425-77-6 3044-06-2 54153-51-4 146822-26-6  
 146822-27-7 146822-28-8 146822-29-9 150172-54-6 151019-65-7  
 151645-01-1

(reaction of, **cyan coupler** from; for color  
**photog.** material contg. **AgCl**-dominant tabular  
 grains)

L25 ANSWER 29 OF 39 HCA COPYRIGHT 2003 ACS

128:174065 **Silver halide color photographic**  
 material having red-sensitive layer with some blue/green  
 sensitivity, and the **image**-forming process. Hayashi,  
 Yasuhiro (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
 JP 10020462 A2 19980123 Heisei, 45 pp. (Japanese).  
 CODEN: JKXXAF. APPLICATION: JP 1996-186895 19960628.

GI



AB Claimed color **photog.** material is characterized by (1)  
 that .gtoreq.1 of **cyan-coupler**-contg.  
 red-sensitive layer(s) contains, in the amt. of .gtoreq.50% of total  
 grain-projected areas, **AgCl**-dominant grains (**AgCl**  
 content .gtoreq.95 mol%) comprising (100) surfaces as the major  
 plane and spectrally sensitized by red-sensitizing and green- and/or  
 blue-sensitizing dyes, and (2) that the **cyan**  
**coupler** incorporated in the layer(s) is represented by the  
 formula I (Za = -CR<sub>3</sub>-, -N-; when Za = -N-, Zb = CR<sub>3</sub>, and when Za =  
 -CR-, Zb = -N-; R<sub>1</sub>, R<sub>2</sub> = electron-attractive group with Hamet's  
 sigma const. of 0.2-1.0; R<sub>3</sub> = substituent; R<sub>4</sub>, R<sub>5</sub> = H, aliph., aryl,  
 heterocyclic group; R<sub>4</sub> and R<sub>5</sub> may be combined to form a ring). Also  
 claimed is the **image**-forming process in which the  
**photog.** material is exposed by a scanning mode, followed by  
 chromogenic development. Preferable scanning procedure is by laser  
 beam scanning. It has rapid developability and good storage  
 stability, and particularly it improves color reprodn. quality of  
 shadow details, which is prone to be insufficient when the  
**coupler** provides **cyan** color with high purity.  
 Thus, a multilayer color neg. film comprising **AgCl**  
 -dominant emulsion layers was added by 2-tert-butyl-5-  
 diethylaminocarbonyloxy-6-cyano-7-(2,6-di-tert-butyl-4-methyl-  
 cyclohexyloxycarbonyl)-pyrrolo[1,2d]imidazole in both low and high

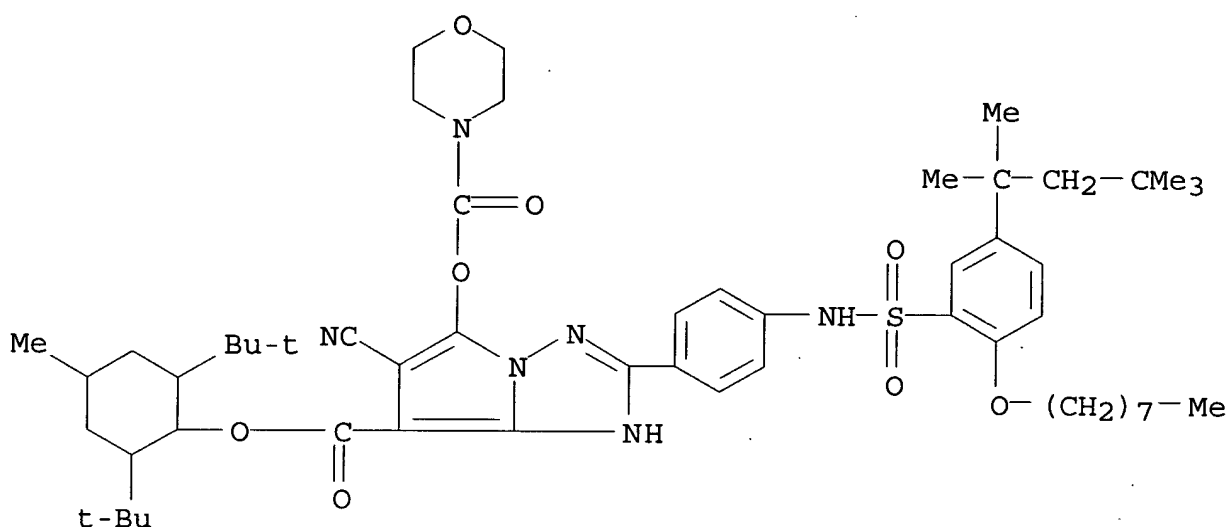
speed red-sensitive layers which were spectrally sensitized to red and somewhat to green.

IT 184773-62-4

(coupler; color photog. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICS G03C001-00; G03C001-035; G03C001-09; G03C001-12; G03C005-08; G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrroloazole cyan coupler photog

material; pyrrolotriazole cyan coupler

photog material; spectral sensitization color photog

material; scanning mode processing photog material

IT Photographic emulsions

(color photog. material having red-sensitive AgCl-dominant emulsion layer with some blue/green sensitivity)

IT Cyan couplers

Photographic processing

(color photog. material having red-sensitive layer with some blue/green sensitivity for scanning-mode processing)

IT Photographic sensitizers

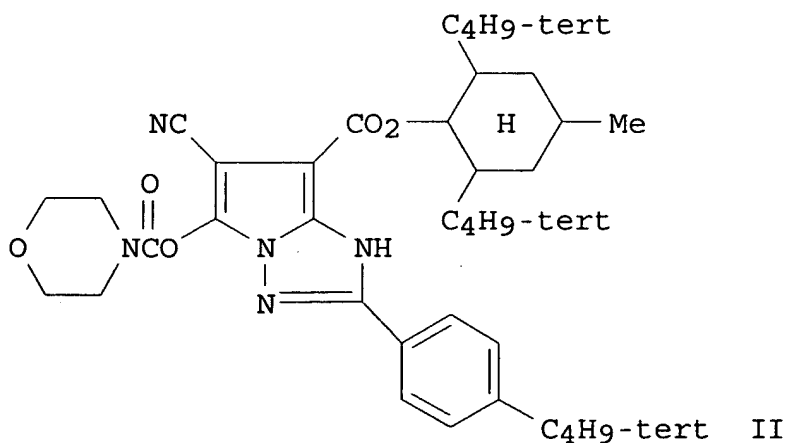
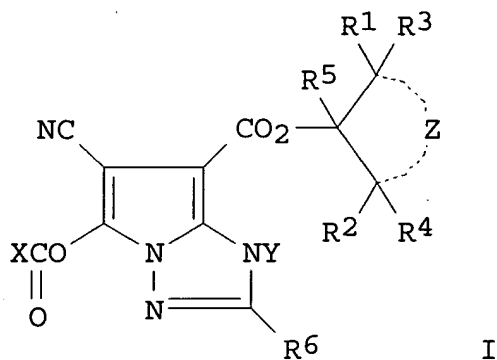
(spectral; color photog. material having red-sensitive layer with some blue/green sensitivity for scanning-mode

processing)  
 IT 178744-03-1 184773-62-4 188745-52-0  
 202927-10-4 202927-11-5 202927-12-6 202927-13-7  
 202927-14-8 202927-15-9 202927-16-0  
 (coupler; color photog. material having  
 red-sensitive layer with some blue/green sensitivity for  
 scanning-mode processing)  
 IT 41665-49-0 90895-32-2 102731-88-4 178888-89-6 202927-17-1D,  
 deriv  
 (dye; color photog. material having red-sensitive layer  
 with some blue/green sensitivity for scanning-mode processing)

L25 ANSWER 30 OF 39 HCA COPYRIGHT 2003 ACS

128:134335 **Silver halide color photographic**  
 material using novel **cyan coupler**. Kawai,  
 Hiroshi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho  
 JP 10003147 A2 19980106 Heisei, 38 pp. (Japanese).  
 CODEN: JKXXAF. APPLICATION: JP 1996-157034 19960618.

GI

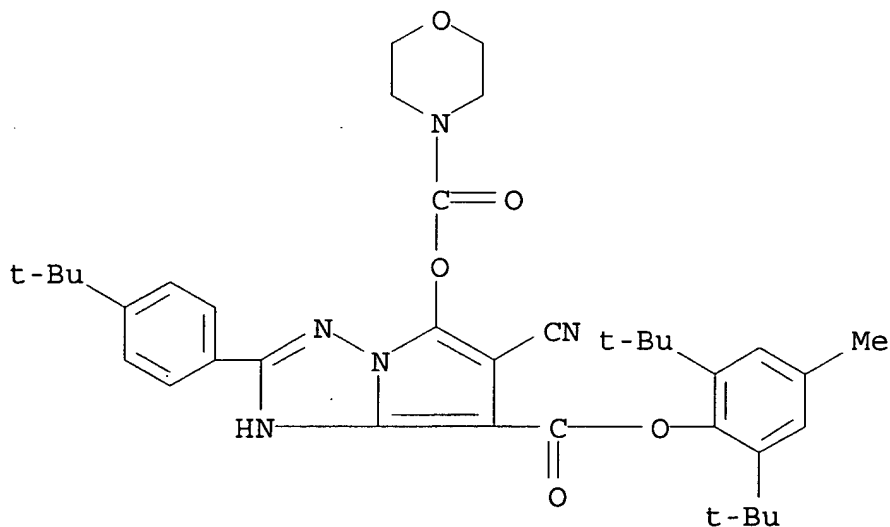


AB The title material, possessing **photog.** constitutive layers comprising yellow, magenta, and **cyan-coloring Ag halide** emulsion layers and .gtoreq.1 non-photosensitive hydrophilic layer on a support, contains .gtoreq.1 **cyan-coloring coupler I** [R1-5 = H or substituent; Z = (substituted) nonmetal atoms required to form a ring; X = heterocycle, (substituted) amino of which the substituents may link to form a ring; aryl; Y = H or substituent; R6 = substituent] in the **cyan-coloring** layer and an antioxidant with mol. wt. .ltoreq.330 in .gtoreq.1 of the constitutive layers. The material shows good color reproducibility and stable **photog.** properties independent of the variation in processing even after storage for long periods of time. Thus, a multilayer color **photog.** film was prepd. by using a red-sensitive Ag(Br,Cl) emulsion layer contg. II and an UV-absorbing layer contg. ascorbic acid for the antioxidant.

IT 200111-37-1  
(triazole deriv. **photog cyan coupler**)

RN 200111-37-1 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-(1,1-dimethylethyl)phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylphenyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICS G03C007-00; G03C007-392

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **cyan coupler** triazole deriv **photog**;  
antioxidant **photog** film

IT Antioxidants  
(**photog.** film contg. antioxidant)

- IT **Cyan couplers**  
 (triazole deriv. **photog cyan coupler**  
 )
- IT 50-81-7, L-Ascorbic acid, uses 149-45-1 33901-81-4  
 (**photog.** film contg. antioxidant)
- IT 191274-16-5 200111-37-1 201931-72-8  
 (triazole deriv. **photog cyan coupler**  
 )

L25 ANSWER 31 OF 39 HCA COPYRIGHT 2003 ACS

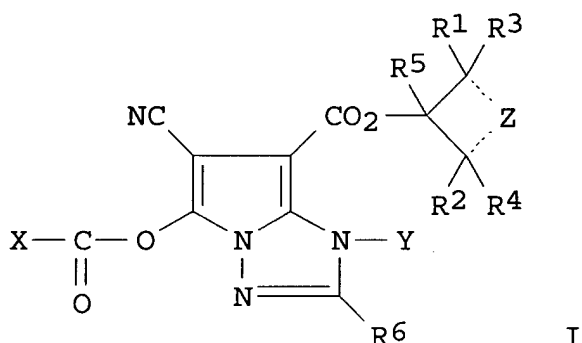
128:68433 **Silver halide photographic**

material containing pyrrolotriazole **coupler** and amine.

Morigaki, Masakazu; Mikoshiba, Hisashi; Yoneyama, Hiroyuki (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09288339 A2 19971104 Heisei, 65 pp. (Japanese). CODEN: JKXXAF.

APPLICATION: JP 1996-126445 19960423.

GI



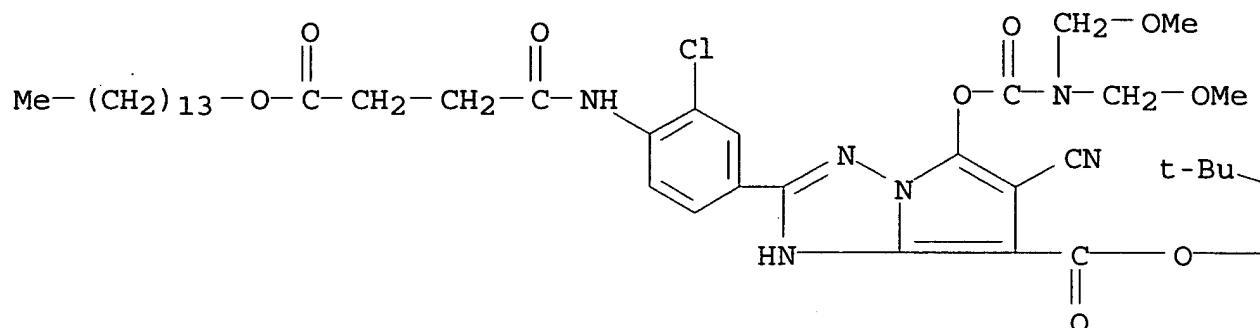
- AB Claimed **photog.** material has a layer contg. (1) a pyrrolotriazole **coupler** I (R1-5 = H, substituent; Z = non-metal ring; X = heterocyclic group, amino, aryl; R6 = substituent; Y = H, substituent) and (2) a compd. Ra1OLNRa2Ra3, where Ra1, Ra2, and Ra3 are alkyl, alkenyl, aryl, heterocyclic group; L = arylene or single bond; Ra1 and L, Ra2 and L, Ra3 and L, Ra1 and Ra2, Ra2 and Ra3, Ra1 and Ra3 may be combined to form 5-7-membered ring; Ra3 may also be H. It has good color reprodn. quality, good dye stability and provides an **image** with low **cyan** and yellow dye stains. Thus, in a multilayer color paper, **coupler** I (R1-5 and Z = 2,6-di-tert.-butyl-4-methylcyclohexyl; R6 = 4-tert.-butylphenyl; Y = H; X = morpholine-4-yl) and 1-methoxy-2,2,6,6-tetramethyl-4-tetradecoyle-piperidine were incorporated to provide the mentioned advantages.

- IT 200216-39-3  
 (**photog.** material contg. pyrrolotriazole **coupler** and amines to reduce yellow and **cyan** stains)

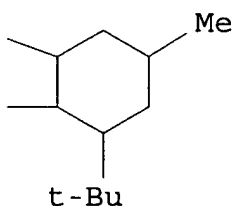
RN 200216-39-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 5-[[[bis(methoxymethyl)amino]carbonyl]oxy]-2-[3-chloro-4-[[1,4-dioxo-  
 4-(tetradecyloxy)butyl]amino]phenyl]-6-cyano-, 2,6-bis(1,1-  
 dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03C007-38  
 ICS C07D487-04; G03C007-00; G03C007-388; G03C007-392  
 CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 ST pyrrolotriazole **cyan coupler photog**  
 material; amine additive color **photog** material;  
 piperidinyl compd additive **photog** material  
 IT Color **photographic** paper  
**Cyan couplers**  
 (photog. material contg. pyrrolotriazole  
**coupler** and amines to reduce yellow and **cyan**  
 stains)  
 IT Amines, uses  
 (photog. material contg. pyrrolotriazole  
**coupler** and amines to reduce yellow and **cyan**  
 stains)



IT 178743-91-4 200216-39-3 200216-40-6  
200216-41-7  
(**photog.** material contg. pyrrolotriazole  
**coupler** and amines to reduce yellow and **cyan**  
stains)

IT 2516-92-9 40289-91-6 129607-55-2 188574-29-0 200216-42-8  
200216-43-9 200216-44-0 200216-45-1 200216-46-2 200216-48-4  
200216-49-5 200216-50-8 200216-51-9 200216-55-3 200277-24-3  
200277-28-7 200277-35-6 200277-40-3 200277-46-9  
(**photog.** material contg. pyrrolotriazole  
**coupler** and amines to reduce yellow and **cyan**  
stains)

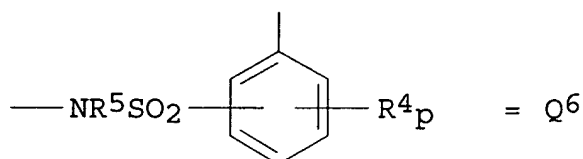
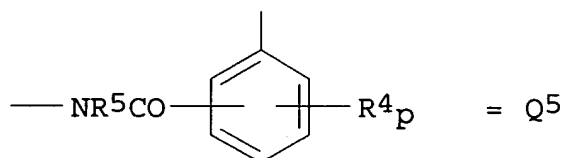
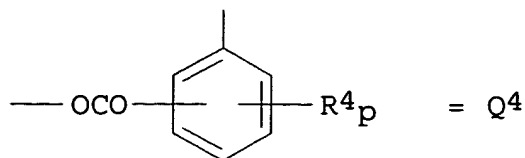
IT 188745-52-0P  
(**photog.** material contg. pyrrolotriazole  
**coupler** and amines to reduce yellow and **cyan**  
stains)

IT 190436-30-7P 194419-30-2P 194419-31-3P 200049-66-7P  
(pyrrolotriazole **coupler** from; for **photog.**  
materials)

IT 105-34-0 407-25-0 15159-40-7, 4-Morpholinecarbonyl chloride  
163119-16-2 194419-32-4  
(pyrrolotriazole **coupler** from; for **photog.**  
materials)

L25 ANSWER 32 OF 39 HCA COPYRIGHT 2003 ACS  
127:270436 **Silver halide color photographic**  
material and manufacture of color filter using it. Mizukawa,  
Hiroki; Igarashi, Tatsuya; Hirai, Hiroyuki (Fuji Photo Film Co.,  
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09218494 A2  
19970819 Heisei, 81 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1996-45571 19960208.

GI



AB The title material contains .gtoreq.2 polymer **couplers** selected from: (a) copolymers of .gtoreq.1 yellow **coupler** monomer Q1L2jL1iCR1:CH2 [I; R1 = H, Cl, alkyl, aryl; L1 = CONR2, CO2, NR2CO, OCO, Q4-6 (R4 = substituent; R5 = H, alkyl, aryl, heterocycle, p = 0-4); L2 = divalent linking group; i, j = 0 or 1; Q1 = yellow **coupler** residue forming a yellow dye upon **coupling** with oxidized color developing agents] with .gtoreq.1 magenta **coupler** monomer Q2L4hL3gCR3:CH2 (II; R3, L3, L4, g, and h are same meanings as R1, L1, L2, i, and j, resp.: Q2 = magenta **coupler** residue forming a magenta dye upon **coupling** with oxidized color developing agents) and optional .gtoreq.1 non-coloring monomer having .gtoreq.1 ethylene group which has no ability of **coupling** with oxidized color developing agents; (b) copolymers of .gtoreq.1 I with .gtoreq.1 cyan **coupler** monomer Q3L6nL5mCR6:CH2 (III; R6, L5, L6, m, and n are same meanings as R1, L1, L2, i, and j, resp.; Q3 = cyan **coupler** residue forming a cyan dye upon **coupling** with oxidized color developing agents) and the optional .gtoreq.1 non-coloring monomer; and (c) copolymers of .gtoreq.1 II with .gtoreq.1 III and the optional .gtoreq.1 non-coloring monomer. The material for color filter comprising a support coated with .gtoreq.3 different color-sensitive **Ag halide** emulsion layers, contains .gtoreq.2 of the polymer **couplers**. The material is patternwise exposed and subjected to color development and desilvering to give a color filter with

blue, green, and red pixel patterns and black matrix. The color filter prepd. by the above process is also claimed. The materials provides high quality **images** with good thermal resistance and lightfastness useful for color filters.

IT 196100-43-3

(silver halide photog. film contg.

polymer coupler for manuf. of color filter)

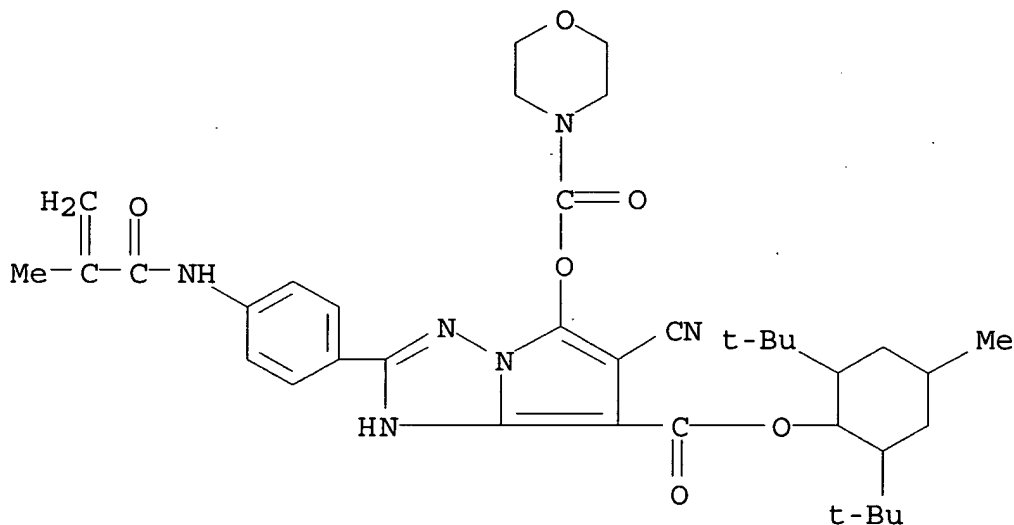
RN 196100-43-3 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester, polymer with N-[3-[6-(1,1-dimethylethyl)-7-(1H-pyrazol-1-yl)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]-2-propenamide and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 194280-62-1

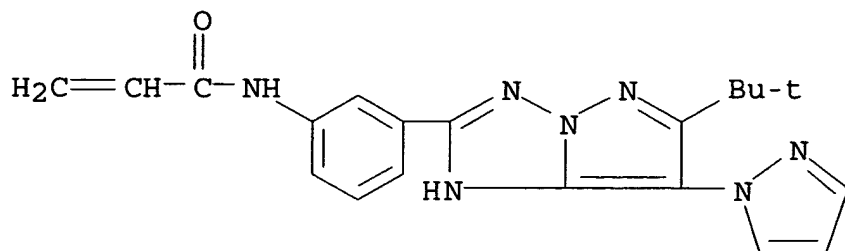
CMF C37 H48 N6 O6



CM 2

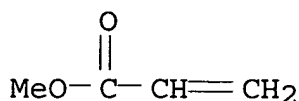
CRN 189814-83-3

CMF C20 H21 N7 O



CM 3

CRN 96-33-3  
CMF C4 H6 O2



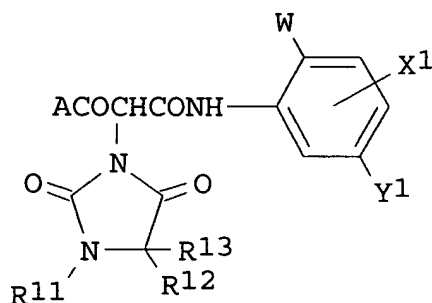
IC ICM G03C007-327  
ICS G02B005-20  
CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST color filter **photog** material polymer **coupler**  
IT Optical filters  
Photographic couplers  
(silver halide photog. film contg.  
polymer **coupler** for manuf. of color filter)  
IT 194412-80-1  
(Silver halide color photog.  
material and manuf. of color filter using it)  
IT 194153-06-5 194153-09-8 194153-12-3 194153-14-5 194153-20-3  
194153-36-1 194153-63-4 194280-35-8 194280-38-1 194280-41-6  
194280-52-9 194280-55-2 194280-74-5 194412-83-4 194412-86-7  
194412-99-2 196099-76-0 196099-78-2 196099-80-6 196099-82-8  
196099-84-0 196099-87-3 196099-89-5 196099-91-9 196099-99-7  
196100-03-5 196100-09-1 196100-14-8 196100-20-6 196100-25-1  
196100-31-9 196100-35-3 196100-40-0 **196100-43-3**  
196100-47-7 196100-50-2 196100-53-5 196100-56-8  
**196100-58-0** 196100-60-4 196100-63-7 196100-66-0  
196100-68-2 196100-70-6 196100-72-8 196100-74-0 196100-76-2  
196100-78-4 196100-80-8 196105-97-2  
(silver halide photog. film contg.  
polymer **coupler** for manuf. of color filter)

L25 ANSWER 33 OF 39 HCA COPYRIGHT 2003 ACS

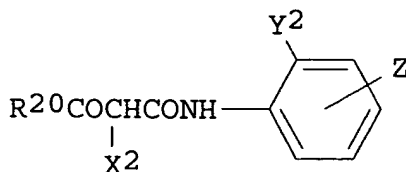
127:72946 **Silver halide** color **photographic**  
material with improved fog resistance. Makuta, Toshiyuki (Fuji  
Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09127660 A2

19970516 Heisei, 85 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1995-309749 19951106.

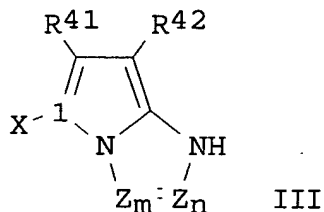
GI



I



II



III

AB The title material contains a yellow **coupler(s)** I (A = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl; aryl, indolyl; W = halo, alkoxy, aryloxy, alkyl, acyloxy, dialkylamino; X1 = H, substituent; Y1 = acylamino, alkoxy, sulfoneamido, carbamoyl, sulfamoyl, alkoxy carbonyl, sulfonyl; R11 = H, alkyl, cycloalkyl, acyl, sulfonyl; R12, R13 = H, alkyl, alkoxy, sulfonyl) and/or II (R20 = tert-alkyl, tert-cycloalkyl, aliph. heterocyclyl, aryl, indolyl; X2 = group capable of leaving upon reaction with color developer; Y2 = halo, alkoxy, aryloxy, acyloxy, dialkylamino, alkyl; Z = NHCOR21, NHCOOR22, NHCOL1OCOR23, NHPOR24R25, NHCOL2SR26, NHCOL3COOR27, NHCOL4NR28COR29, NHCOL5CONR30R31; R21 = alkenyl, haloalkyl, haloalkenyl; R22 = alkyl, cycloalkyl, alkenyl, aryl; L1 = alkylene; R23 = alkyl, cycloalkyl, alkenyl, aryl; R24, R25 = alkyl, cycloalkyl, aryl, alkoxy, aryloxy, alkylamino, dialkylamino, anilino; L2 = alkylene; R26 = alkyl, aryl; R27 = alkyl, aryl; L4 = alkylene; R28 = H, alkyl, aryl; R29 = alkyl, aryl; L5 = alkylene; R30, R31 = H, alkyl, aryl) and a **cyan coupler(s)** III (Zm, Zn = CR43, N; R41, R42 = electron withdrawing group; R43 = substituent; X = H, group capable of leaving upon **coupling** reaction with oxidized color developer).

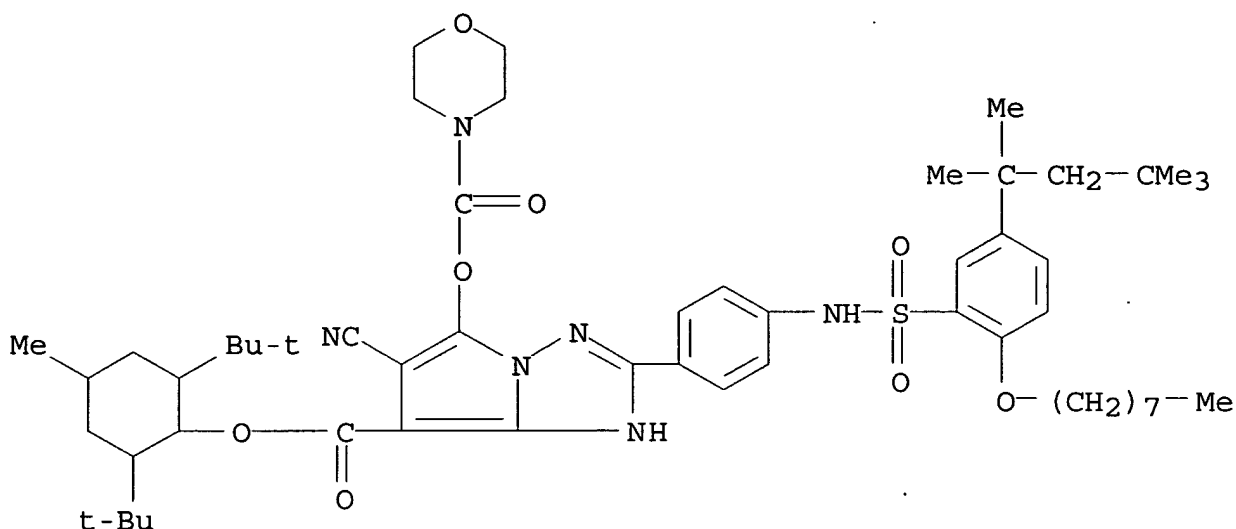
IT 184773-62-4

(photog. cyan coupler for improving  
fog resistance)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,

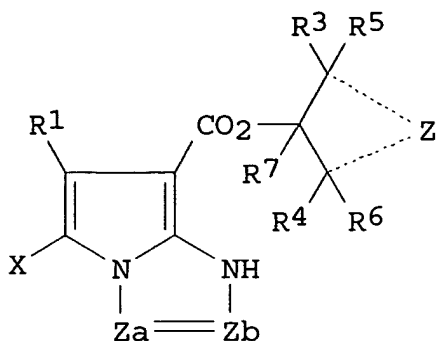
6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



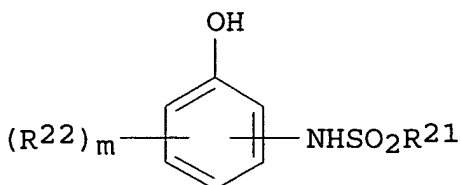
IC ICM G03C007-36  
ICS G03C007-00; G03C007-38  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST **silver halide color photog** material;  
**cyan coupler** yellow acetanilide pyrroloazole  
IT **Photographic paper**  
**Yellow couplers**  
(**silver halide color photog.**  
material with improved fog resistance)  
IT 165178-13-2 184773-62-4 188745-52-0  
191274-16-5  
(**photog. cyan coupler** for improving  
fog resistance)  
IT 176218-64-7 176218-72-7 176533-54-3 178873-41-1 181213-60-5  
184483-61-2 187102-27-8 187102-28-9 191274-09-6  
(**photog. yellow coupler** for improving fog  
resistance)

L25 ANSWER 34 OF 39 HCA COPYRIGHT 2003 ACS  
126:270343 **Silver halide color photographic**  
materials and **image** forming method. Matsuda, Naoto; Ito,  
Takayuki; Saito, Naoki (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai  
Tokkyo Koho JP 09043790 A2 19970214 Heisei, 61 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-210209 19950727.

GI



I



II

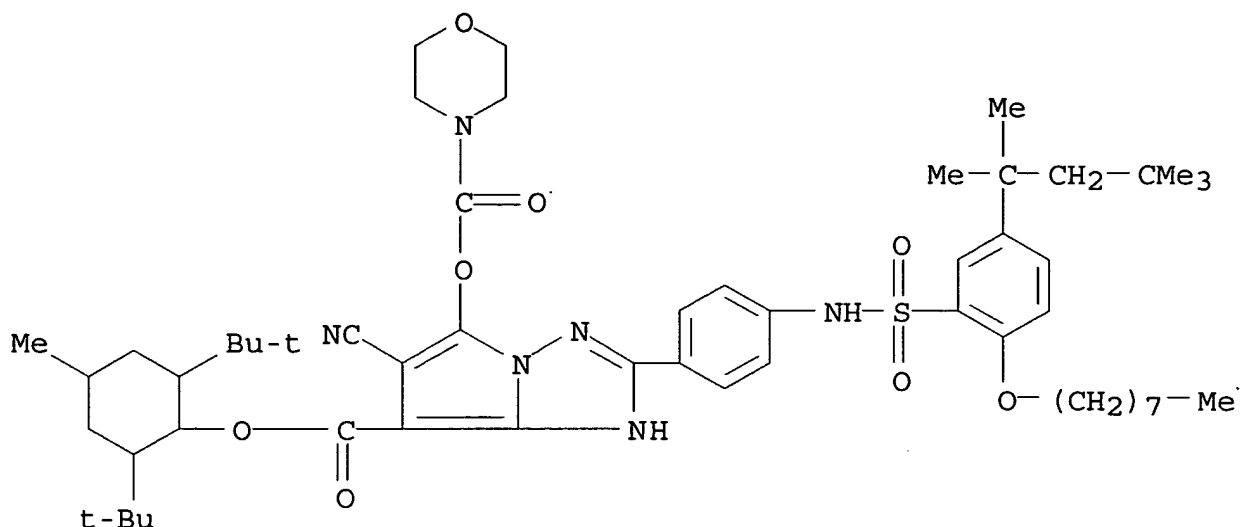
AB Claimed **photog.** materials have .gtoreq.1 red-sensitive layers contg. **cyan couplers** I [Za, Zb = CH(R2) or N; Za .noteq. Zb; R1 = electron-absorbing group; R2 = substituent; X = H or leaving group to be released by **coupling** reaction with oxidized developing agents; R3, R4 = aliph; R5-7 = H or aliph.; Z = ring-forming group] and .gtoreq.1 layers contg. phenol derivs. II (R21 = alkyl, aryl; R22 = substituent; m = 0-4) and colorless **couplers** which react with oxidized arom. primary amine developers and do not contribute to **image** formation. Claimed process comprises black-and-white development followed by treatment with color developers at pH .gtoreq.11. The materials provide good color reprodn. and high-quality **images**.

IT 184773-62-4

(**cyan coupler**; **photog.** materials contg. pyrroloazole compds. and **image** forming method for good color reprodn.)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)

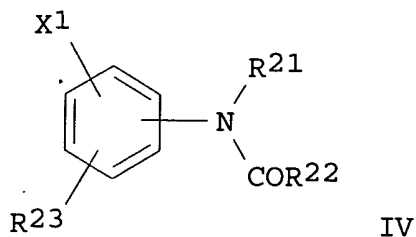
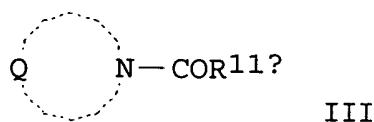
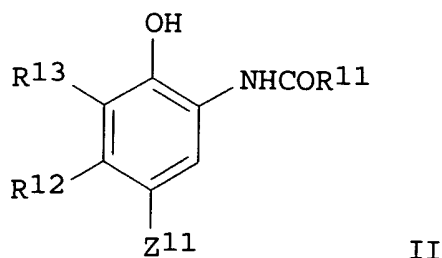
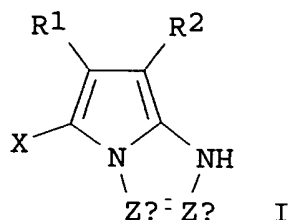


- IC ICM G03C007-38  
ICS G03C005-50; G03C007-00; G03C007-26; G03C007-392; G03C007-407
- CC **74-2** (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)
- ST color **photog** material phenol deriv; pyrroloazole  
**cyan coupler photog**
- IT **Photographic** films  
(color; **photog.** materials contg. pyrroloazole compds.  
and **image** forming method for good color reprodn.)
- IT **Cyan couplers**  
**Photographic** development  
(**photog.** materials contg. pyrroloazole compds. and  
**image** forming method for good color reprodn.)
- IT 101664-24-8 158718-69-5 163674-27-9 188745-56-4 188745-58-6  
(colorless **coupler**; **photog.** materials contg.  
pyrroloazole compds. and **image** forming method for good  
color reprodn.)
- IT 165178-14-3 178743-91-4 **184773-62-4 188745-52-0**  
188745-53-1  
(**cyan coupler**; **photog.** materials  
contg. pyrroloazole compds. and **image** forming method  
for good color reprodn.)
- IT 188745-54-2 188745-55-3  
(**photog.** materials contg. pyrroloazole compds. and  
**image** forming method for good color reprodn.)

L25 ANSWER 35 OF 39 HCA COPYRIGHT 2003 ACS  
126:218497 **Silv r halide color photographic**  
material containing amide compounds, and the **image**-forming  
method. Kase, Akira (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai  
Tokkyo Koho JP 09015802 A2 **19970117** Heisei, 58 pp.  
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-185029 19950629.



GI



AB Claimed **photog.** material is characterized by that the **cyan coupler**-contg. layer contains (1) a pyrroloazole I (Za = N: and Zb = CR<sub>3</sub>:, or Zb = N: and Za = CR<sub>3</sub>:; R<sub>1</sub>, R<sub>2</sub> = electron-attracting group with the Hamet's sigma const. between 0.2 and 1.0; R<sub>3</sub> = substituent; X = H, leaving group to be released by the **coupling** reaction with the oxidized color developing agent) or an acylaminophenol II (R<sub>11</sub> = aliph., arom., heterocyclic group, or arom. or heterocyclic amine; R<sub>12</sub> = aliph. group, acylamino; R<sub>13</sub> = H, halo, aliph., arom. or acylamino group; R<sub>11</sub> and R<sub>13</sub> may be combined to form a ring; Z<sub>11</sub> = H, leaving group to be released by the **coupling** reaction with the oxidized color developing agent) and (2) a cyclic amide III (Q = nonmetallic at. groups necessary to form a 5- to 7-membered ring; R<sub>11a</sub> = alkyl, aryl, alkoxy) or an amidobenzene IV (R<sub>21</sub> = H, alkyl; R<sub>22</sub> = H, alkyl, alkoxy, aryl; R<sub>23</sub> = H, alkyl, alkoxy, aryl, halo, acylamino, sulfoamido). Preferable compds. III are N,N-di-acyl-piperadines, and compds. IV are diacylaminobenzenes. An **image**-forming method by imagewisely exposing the material to scanning light of .1toreq.10<sup>-4</sup> s followed by chromogenic development is also claimed. Preferable processing time is within 90 s on dry-to-dry basis. It has a good **cyan image** stability by preventing reductive dye fading reaction. Thus, a multilayer color paper contg. a **cyan coupler** of 2-acylaminophenol type and N,N-di-[2-(2-chloro-4-tert-pentyl-phenoxy)heptoyl]piperadine [or N-(m-pentadecylbenzo)morpholine] had the mentioned advantages.

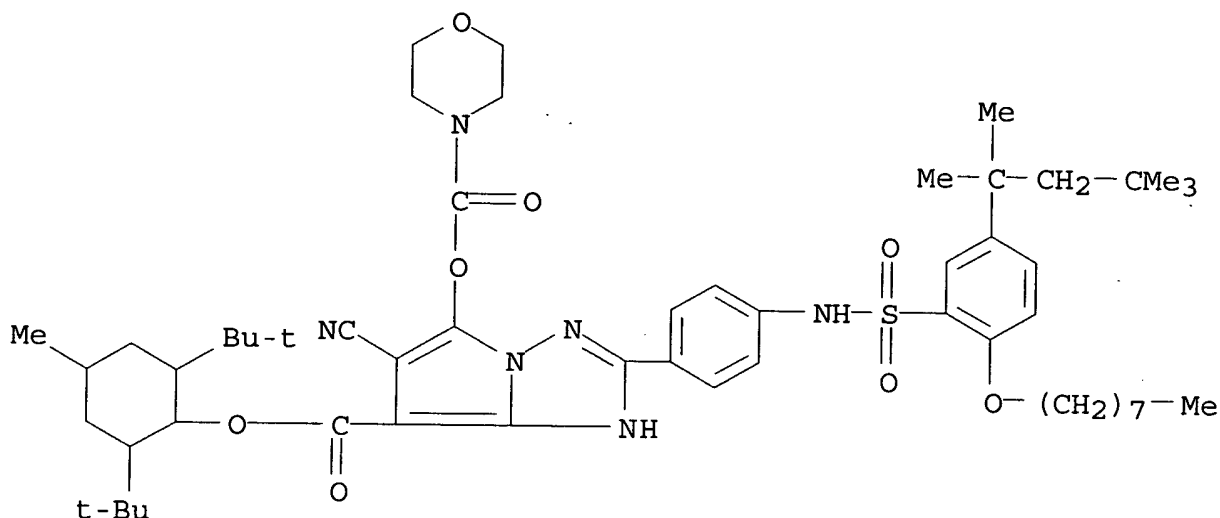
IT 184773-62-4

(cyan coupler; color photog.

material contg. acylaminophenol or pyrroloazole coupler  
and amide compds., and the image-forming method)

RN 184773-62-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,  
2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX  
NAME)



IC ICM G03C007-392

ICS G03C007-392; G03C005-08; G03C007-00; G03C007-26; G03C007-30;  
G03C007-34; G03C007-38; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)

ST silver halide color photog material;  
cyclic amido additive photog material; amido image  
stability photog material; acylaminobenzene additive color  
photog material; acylaminophenol cyan  
coupler photog material; pyrroloazole cyan  
coupler photog material

IT Cyan couplers

Photographic paper

Photographic stabilizers

(color photog. material contg. acylaminophenol or  
pyrroloazole coupler and amide compds., and the  
image-forming method)

IT 31037-84-0 92589-17-8 99661-33-3 178743-91-4  
184773-62-4

(cyan coupler; color photog.

material contg. acylaminophenol or pyrroloazole coupler  
and amide compds., and the image-forming method)

IT 4629-02-1 166893-42-1 181180-37-0 187942-51-4 187942-52-5

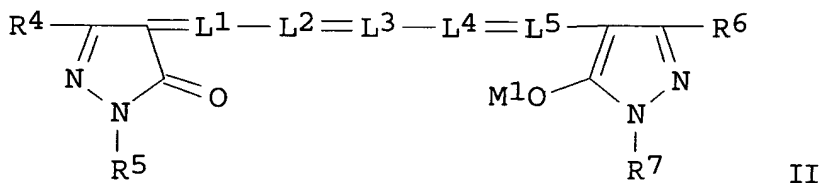
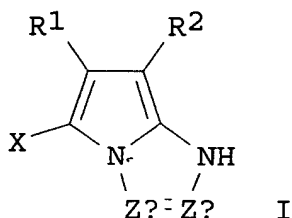
(**image** stabilizer; color **photog.** material contg. acylaminophenol or pyrroloazole **coupler** and amide compds., and the **image**-forming method)

L25 ANSWER 36 OF 39 HCA COPYRIGHT 2003 ACS

126:52818 **Silver halide photographic**

photosensitive material and **image** formation. Yokozawa, Akihito (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08278613 A2 19961022 Heisei, 54 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-107869 19950407.

GI

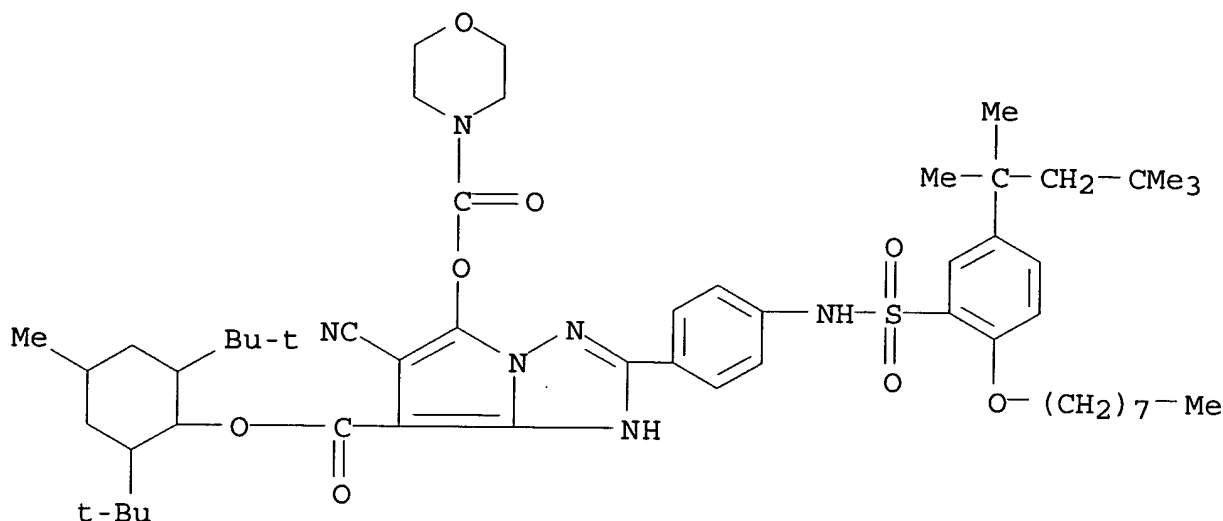


AB The material comprises a support, a photosensitive **Ag halide** emulsion layer contg. a **cyan coupler** I [ $Z_a = C(R_3)$ , N;  $Z_b = C(R_3)$  when  $Z_a = N$ ;  $R_1-2$  = electron attractive group having Hamett's substitution group value  $\sigma_p = 0.20-1.0$ ; X = H or group released by **coupling** reaction with oxidized color developer;  $R_3$  = substitution group] and **Ag halide** emulsion contg.  $\geq 95$  mol% **AgCl**, and a compd. II ( $R_4, R_6$  = electron attractive group having  $\sigma_p \geq 0.3$ ;  $R_5, R_7$  = alkyl, aryl;  $L_1-5$  = methyne;  $M_1$  = H, monovalent cation or metal;  $\geq 1$  of  $L_1-5$  has a substitution group) in a layer constituting the material. The material is scanning exposed to a light, and then color developing treated. The material can be quickly processed, and has stable color d. during continuously processing.

IT 184773-62-4

(**cyan coupler**; **silver halide photog.** photosensitive material contg. pyrazolotriazole **cyan coupler**)

RN 184773-62-4 HCA  
 CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid,  
 6-cyano-5-[(4-morpholinylcarbonyl)oxy]-2-[4-[[[2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-,  
 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX  
 NAME)



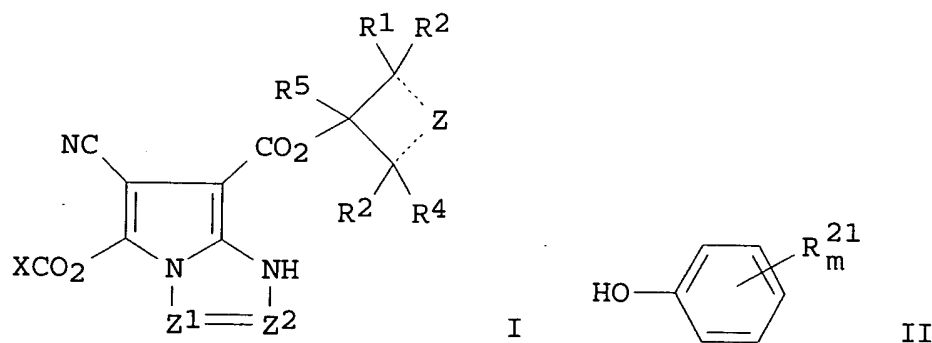
IC ICM G03C007-38  
 ICS G03C001-035; G03C001-83; G03C005-08; G03C007-00; G03C007-407;  
 G03C007-44  
 CC 74-2 (Radiation Chemistry, Photochemistry, and  
 Photographic and Other Reprographic Processes)  
 ST photog cyan coupler pyrazolotriazole  
 IT Photography  
 (dyes; silver halide photog.  
 photosensitive material contg. pyrazolotriazole cyan  
 coupler)  
 IT Cyan couplers  
 Dyes  
 (silver halide photog.  
 photosensitive material contg. pyrazolotriazole cyan  
 coupler)  
 IT 178743-91-4P  
 (cyan coupler; silver  
 halide photog. photosensitive material contg.  
 pyrazolotriazole cyan coupler)  
 IT 165178-13-2 184773-62-4 184947-09-9  
 (cyan coupler; silver  
 halide photog. photosensitive material contg.  
 pyrazolotriazole cyan coupler)  
 IT 184947-10-2 184947-11-3 184947-12-4 184947-13-5  
 (dye; silver halide photog.  
 photosensitive material contg. pyrazolotriazole cyan

- coupler)**
- IT 184947-15-7P 184947-16-8P 184947-17-9P 184947-18-0P  
(in manuf. of pyrazolotriazole **cyan coupler**  
for **silver halide photog.**  
photosensitive material)
- IT 105-34-0, Methyl cyanoacetate 684-80-0 15159-40-7,  
4-Morpholinecarbonyl chloride 39416-48-3 163119-16-2  
184947-14-6  
(in manuf. of pyrazolotriazole **cyan coupler**  
for **silver halide photog.**  
photosensitive material)
- IT 7783-90-6, **Silver chloride**, uses  
(**silver halide photog.**  
photosensitive material contg. pyrazolotriazole **cyan**  
**coupler**)

L25 ANSWER 37 OF 39 HCA COPYRIGHT 2003 ACS

126:39642 **Silver halide color photographic**  
material and **image** formation using it. Ozawa, Takashi;  
Takizawa, Hiroo; Shimada, Yasuhiro; Ito, Takayuki (Fuji Photo Film  
Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08262662 A2  
19961011 Heisei, 57 pp. (Japanese). CODEN: JKXXAF.  
APPLICATION: JP 1995-67471 19950327.

GI



- AB The material contains a **cyan coupler I** [Z1 = CR6, N; when Z1 = CR6, Z2 = N and when Z1 = N, Z2 = CR6; R1-5 = H, substituent; R6 = substituent; Z = nonmetal atoms to form (substituted) ring; X = (substituted) amino, aryl, heterocycle] and H-donating compd to form H-bond. The H-donating compd. may be II, R22ANHR23, R24R25NCONHR26, or (R27Op)(R28Oq)P(:O)NHR29 (R21 = substituent; m = 1-5; R22, R25, R27, R28 = aliph. group or aryl; R23, R24, R26, R29 = H, aliph. group, aryl; A = SO2, CO, OCO; p, q = 0 or 1; the total C no. of the each group is 13-60). The material is imagewise exposed, black-and-white-developed, and processed with a color developing soln. with pH .gtoreq.11 to form an **image**. The material shows stable coloring properties independent of the

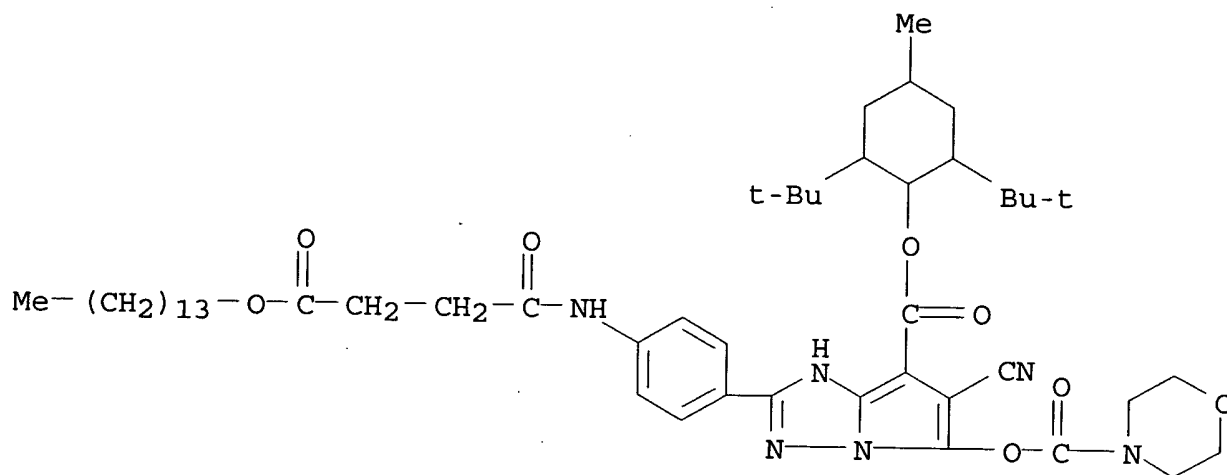
compns. of bleaching soln. and provides high quality **cyan images** with good storage stability.

IT 178744-07-5

(pyrrolotriazole deriv. **photog. cyan coupler**)

RN 178744-07-5 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[4-[[1,4-dioxo-4-(tetradecyloxy)butyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



IC ICM G03C007-38

ICS G03C005-50; G03C007-00; G03C007-388; G03C007-407

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pyrrolotriazole **cyan coupler photog**;  
hydrogen donating compd **photog** film

IT **Photographic** films

(**photog.** film contg. pyrrolotriazole **cyan coupler** and hydrogen-donating compd.)

IT **Cyan couplers**

(pyrrolotriazole deriv. **photog. cyan coupler**)

IT 178744-15-5P

(bromination of; prepn. of pyrrolotriazole deriv. **photog. cyan coupler**)

IT 178744-17-7P

(hydrolysis of; prepn. of pyrrolotriazole deriv. **photog. cyan coupler**)

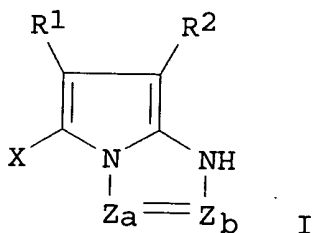
IT 22164-72-3 88389-80-4 136664-55-6 136664-65-8 160379-87-3  
173982-24-6 174285-88-2 184773-63-5 184773-64-6 184773-67-9  
184773-68-0 184773-69-1 184773-70-4

(**photog.** film contg. pyrrolotriazole **cyan coupler** and hydrogen-donating compd.)

IT 178744-16-6P 178744-18-8P

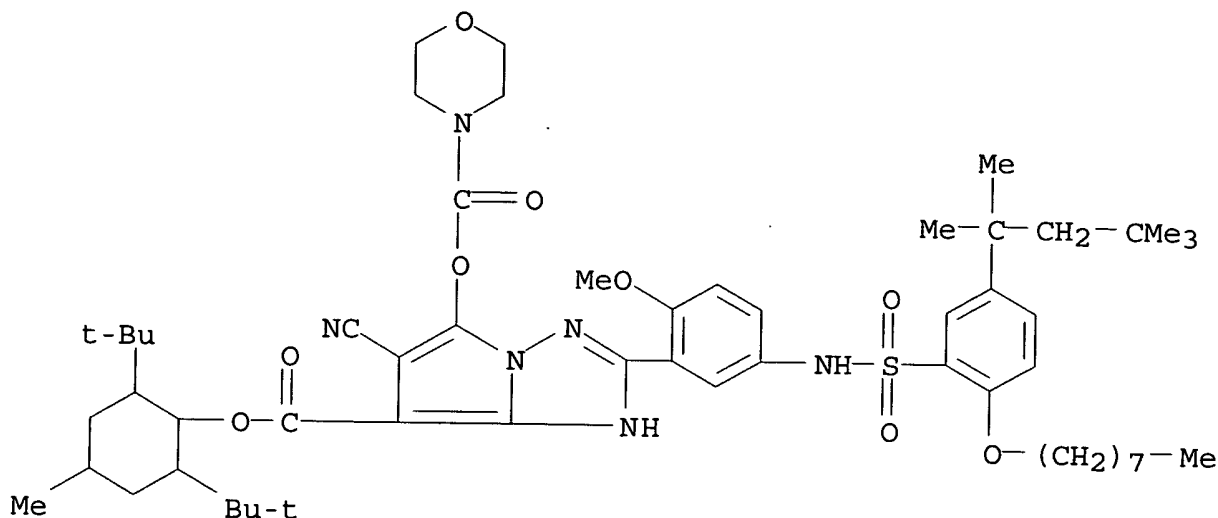
- (prepn. of pyrrolotriazole deriv. photog. cyan coupler)
- IT 105-34-0, Methyl cyanoacetate 111-94-4 503-38-8, Trichloromethyl chloroformate 15159-40-7, 4-Morpholinecarbonyl chloride 163119-16-2, 2,6-Di-tert-butyl 4-methylcyclohexanol 178744-14-4 178744-19-9
- (prepn. of pyrrolotriazole deriv. photog. cyan coupler)
- IT 178744-07-5 182920-44-1 183744-87-8 183744-89-0 184773-61-3 184773-62-4
- (pyrrolotriazole deriv. photog. cyan coupler)
- IT 178743-91-4P 178743-95-8P
- (pyrrolotriazole deriv. photog. cyan coupler)
- L25 ANSWER 38 OF 39 HCA COPYRIGHT 2003 ACS
- 125:288719 Silver halide color photographic material containing pyrroloazole cyan coupler and hydrazine compound. Fukuzawa, Yutaka; Nakamura, Takashi; Ono, Michio (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08201999 A2 19960809 Heisei, 50 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-27753 19950125.

GI



- AB The photog. material contains a cyan coupler I (Za, Zb = CR<sub>3</sub>, N; R<sub>1</sub>, R<sub>2</sub> = electron-attractive group having Hammett's .sigma.p const. 0.20-1.0; R<sub>3</sub> = substituent; X = H, leaving group) and a hydrazine compd. (R<sub>21</sub>NA<sub>21</sub>NA<sub>22</sub>)mP(:X)(R<sub>22</sub>)n (R<sub>21</sub> = aryl, heterocyclic group; R<sub>22</sub> = alkyl, cycloalkyl, aryl, alkoxy, aryloxy; A<sub>21</sub>, A<sub>22</sub> = H, group leaving with alkali; m = 1, 2, 3; n = 0, 1, 2; m + n = 3; X = S, O). The photog. material shows good storage stability and gives clear color photog. images without spots.
- IT 182920-44-1
- (Ag halide color photog. material contg. pyrroloazole cyan coupler and hydrazine compd.)
- RN 182920-44-1 HCA
- CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 6-cyano-2-[2-methoxy-5-[[2-(octyloxy)-5-(1,1,3,3-

tetramethylbutyl)phenyl]sulfonyl]amino]phenyl]-5-[(4-morpholinylcarbonyl)oxy]-, 2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl ester (9CI) (CA INDEX NAME)



- IC ICM G03C007-38  
ICS G03C005-50; G03C007-00; G03C007-392; G03C007-407  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST pyrroloazole **cyan coupler photog**;  
hydrazine color **photog** material  
IT **Photographic couplers**  
(cyan, Ag halide color  
**photog.** material contg. pyrroloazole **cyan**  
**coupler** and hydrazine compd.)  
IT 180639-07-0 182801-44-1 182801-45-2 182920-40-7  
182920-44-1 182920-47-4 182920-50-9  
182920-81-6 182920-88-3 182920-91-8 182920-94-1  
(Ag halide color **photog.** material  
contg. pyrroloazole **cyan coupler** and  
hydrazine compd.)  
IT 178743-91-4P 178743-95-8P 180051-26-7P 180051-27-8P  
(Ag halide color **photog.** material  
contg. pyrroloazole **cyan coupler** and  
hydrazine compd.)  
IT 112-53-8, 1-Dodecanol 814-49-3, Diethyl chlorophosphate  
10025-87-3, Phosphorus oxychloride 182801-46-3  
(in prepn. of hydrazine compd. for **photog.** material)  
IT 178744-15-5P 178744-16-6P 178744-17-7P 178744-18-8P  
178744-19-9P 178744-20-2P  
(in prepn. of pyrroloazole **photog. cyan**  
**coupler**)  
IT 111-94-4 503-38-8 15159-40-7, 4-Morpholinecarbonyl chloride  
163119-16-2 178744-14-4



(in prepn. of pyrroloazole photog. cyan coupler)

L25 ANSWER 39 OF 39 HCA COPYRIGHT 2003 ACS

125:44970 Silver halide color reversing

photographic material with superior color reproducibility and sharpness and its processing. Fukagawa, Nobutaka; Kawagishi, Toshio (Fuji Photo Film Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 08095211 A2 19960412 Heisei, 102 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-254115 19940926.

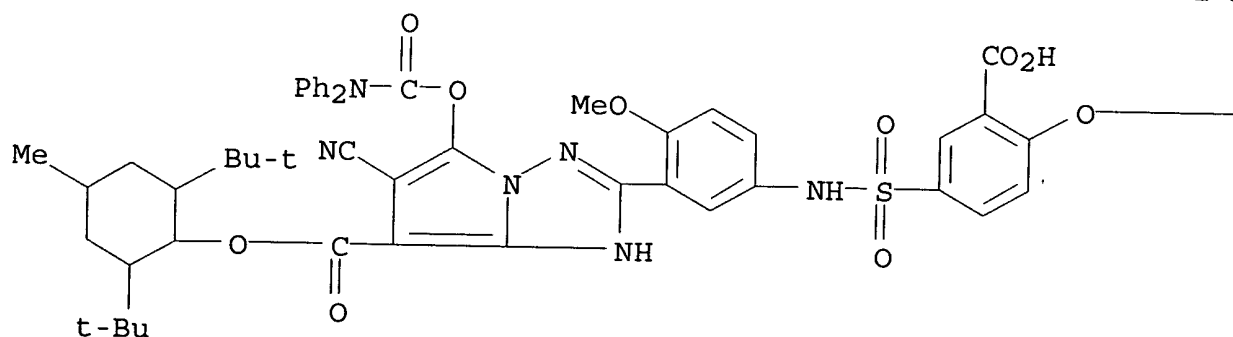
AB In the title full color photog. material, .gtoreq.1 red sensitive layer contains a 5-5-membered or a 5-6-membered condensed N-contg. heterocyclic cyan coupler, or .gtoreq.1 blue-sensitive layer contains an indoline yellow coupler, and .gtoreq.1 layer contains compd. A-{(L1)a-(B)m}p-(L2)n-DI (A, B = releasing group upon reacting with an oxidized arom. primary amine developer; L1, L2 = releasing group; DI = development suppressor of suppressing strength .gtoreq.1 and .ltoreq.5; a, m, n = 0, 1; p = 0-2). Processing the photog. material includes exposing, black-and-white developing, fogging the unexposed Ag halide particles and color developing.

IT 177984-72-4  
(cyan coupler for color reversing photog. film)

RN 177984-72-4 HCA

CN 1H-Pyrrolo[1,2-b][1,2,4]triazole-7-carboxylic acid, 2-[5-[[[3-carboxy-4-(octyloxy)phenyl]sulfonyl]amino]-2-methoxyphenyl]-6-cyano-5-[[[(diphenylamino)carbonyl]oxy]-, 7-[2,6-bis(1,1-dimethylethyl)-4-methylcyclohexyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— (CH<sub>2</sub>)<sub>7</sub>—Me

IC ICM G03C007-00  
ICS G03C005-50; G03C007-305; G03C007-36; G03C007-38; G03C007-407  
CC 74-2 (Radiation Chemistry, Photochemistry, and  
Photographic and Other Reprographic Processes)  
ST color reversing **photog** material **coupler**; DIR  
compd color reversing **photog** material  
IT **Photographic** films  
(color reversing; contg. **cyan coupler** or  
yellow **coupler** and specified DIR compd.)  
IT **Photographic** processing  
(including black-and-white developing and color developing)  
IT **Photographic couplers**  
(**cyan**, for color reversing **photog.** material)  
IT 177984-68-8 177984-69-9  
(DIR compd. for color reversing **photog.** film)  
IT 177984-70-2P  
(DIR compd. for color reversing **photog.** film)  
IT 177984-71-3 177984-72-4 177984-73-5  
177984-74-6  
(**cyan coupler** for color reversing  
**photog.** film)  
IT 105219-34-9P 113824-73-0P 177984-77-9P 177984-78-0P  
177984-79-1P  
(prepd. for prepn. of DIR compd. for color reversing  
**photog.** film)  
IT 6674-22-2, 1,8-Diazabicyclo[5,4,0]-7-undecene 30525-89-4,  
Para-formaldehyde 49783-80-4, 4-Aminomethylbenzenesulfonamide  
hydrochloride 54978-55-1  
(prepn. of DIR compd. for color reversing **photog.** film)  
IT 153723-45-6 177984-75-7 177984-76-8  
(yellow **coupler** for color reversing **photog.**  
film)